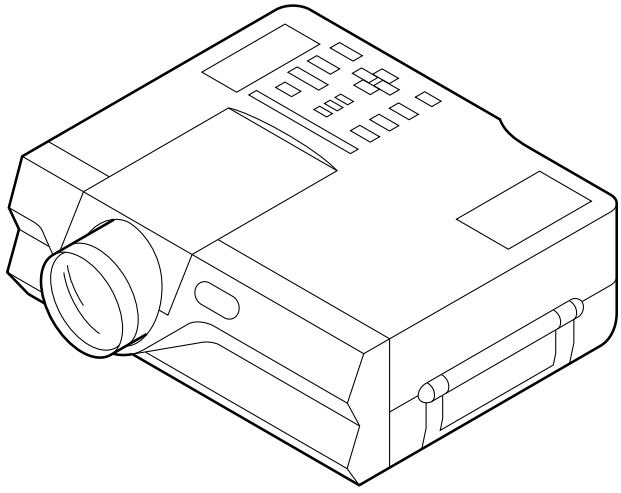
SERVICE MANUAL

MODEL	DEST.
VPL-X1000U	US/CND
VPL-X1000E	AEP
VPL-X1000M	AEP
IFB-X600E	AEP

MODEL
RM-PJM600
PSS-600



VPL-X1000U/X1000E/X1000M LCD Data Projector

IFB-X600E Interface Board (FOR VPL-X1000E/S900E)

RM-PJM600 Remote Commander

PSS-600 Projector Suspension

LCD DATA PROJECTOR

SONY

⚠ WARNING

This manual is intended for qualified service personnel only.

To reduce the risk of electric shock, fire or injuly, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

HIGH TEMPERATURE OF THE LAMP
THE TEMPERATURE AROUND THE LAMP BECAME AWFULLY HIGH WHILE THE POWER ON OR IMMEDIATELY AFTER POWER OFF.
HANDLE WITH CARE TO NOT SCALED.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS ÁLA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE ! SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

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SECTION 1
OPERATING INSTRUCTIONS

1-1. VPL-X1000U/X1000E/X1000M OPERATING INSTRUCTIONS

3-865-632-11 (1)

SONY

LCD Data Projector

EN Operating Instructions

F Mode d'emploi

ES Manual de instrucciones

VPL-X1000U
VPL-X1000E
VPL-X1000M

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English

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

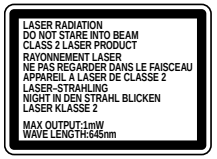
This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the USA

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

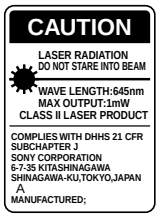
For the customers of VPL-X1000E/X1000M



This label is located on the rear of the Remote Commander.

This label is located on the side of the Remote Commander.

For the customers of VPL-X1000U



This label is located on the rear of the Remote Commander.

This label is located on the rear of the Remote Commander.

Laser light shines out of this window.

Caution

use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes

- Do not aim the laser at people or not look into the laser transmitter.
- When the Remote Commander causes mulfunction, consult with qualified Sony personnel. We change the Remote Commander as new one according to the guarantee.

For the customers in Canada

This Class A digital apparatus complies with Canadian ICES-003.

For the customers in the United Kingdom

WARNING
THIS APPARATUS MUST BE EARTHED

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Voor de klanten in Nederland

Bij dit product zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

The socket-outlet should be installed near the equipment and be easily accessible.

Precautions

On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply. If voltage adaptation is required, consult with qualified Sony personnel.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Do not look into the lens while the lamp is on.
- Do not aim the laser at people or not look into the laser transmitter.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.
- When the projector is mounted on the ceiling, the Sony PSS-600 Projector Suspension Support must be used for installation.
- Be careful not to catch your fingers by the adjusters when you lift up the projector. Do not push hard on the top of the projector with the adjusters out.

On illumination

- To obtain the best picture, the front of the screen should not be exposed to direct lighting or sunlight.
- Ceiling-mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering the contrast ratio.
- Cover any windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

On preventing internal heat build-up

After you turn off the power with the I / ⏻ key on the Remote Commander or on the control panel, do not disconnect the unit from the wall outlet while the cooling fan is still running.

Caution

The projector is equipped with ventilation holes (intake) at the bottom and ventilation holes (exhaust) on the front. Do not block or place anything near these holes, or internal heat build-up may occur, causing picture degradation or damage to the projector.

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Features

High brightness, high picture quality

- **High brightness**
  The LCD panel with aspherical microlens and the 120 W UHP lamp allow high brightness (light output 1000 ANSI lumen) and excellent uniformity on the picture.
- **High resolution**
  By adopting three 1.3-inch, about 790,000-pixel XGA panels, this projector offers resolution of 1024 × 768 dots for RGB input and 750 horizontal TV lines for video input.

Simple setup

- **Sony original APA (Auto Pixel Alignment) function**
  You can get the clearest picture automatically by simply pressing the APA key when the signal is input from a computer.
- **Simple setup with external equipment**
  This projector has 38 kinds of preset data for input signals. You can get a suitable picture by connecting an equipment with supplied cable and pressing the APA key.

Easy presentation

- **Remote Commander with mouse control and laser pointer functions**
  You can operate a computer with the Remote Commander since the unit has a build-in mouse receiver. For your presentation, you can use the laser pointer built in the Remote Commander as well.
- **High portability**
  This projector has been downsized to 5.9 kg (13 lb) of mass and 12 cm (4 3/4 inches) of height. In addition, the carrying handle and the front cover that holds the Remote Commander make it all the more convenient to carry.

Accepts various input signals

- **Scan converter loaded**
  This projector has a build-in scan converter which converts the input signal within 1024 × 768 dots.
- **Compatible input signals**
  This projector accepts video signals of the composite, S video, and component as well as the 15 k RGB, VGA[1], SVGA[1] XGA[1], and SXGA[1] signals, which all can be displayed.
- **Compatible with five color systems**
  NTSC, PAL, SECAM, NTSC 4.43[2], or PAL-M color system can be selected automatically or manually.

Note on the VPL-X1000E model

The optional IFB-X600E Interface Board is required for video composite input.

1) VGA, SVGA, XGA, and SXGA are registered trademarks of the International Business Machines Corporation, U.S.A.
2) NTSC4.43 is the color system used when playing back a video recorded on NTSC on a NTSC4.43 system VCR.

On cleaning

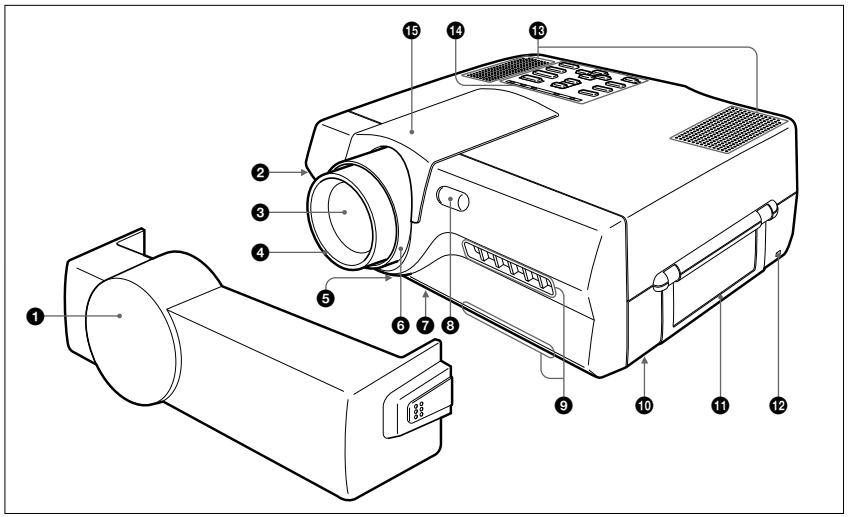
- To keep the cabinet looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner, benzene, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.
- Clean the filter at regular intervals.

On repacking

- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

Location and Function of Controls

Front



1 Front cover
Installs the Remote Commander in the back of the front cover.

2 Front adjuster button

3 Lens
Remove the front cover and the lens cap before projection.

4 Focus ring
Adjusts the picture focus.

5 Ventilation holes (bottom / intake)

6 Zoom ring
Adjusts the size of the picture.

7 Front adjuster
Used to keep the projector level if it is installed on an uneven surface.
For details on how to use the adjusters, see "How to use the adjusters" on page 11 (EN).

8 Front remote control detector

9 Ventilation holes (exhaust)

Notes
- Do not place anything near the ventilation holes as it may cause internal heat build-up.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.

10 Lamp cover (bottom)

11 Carrying handle
Used for carrying the projector.

12 Security lock
Connects to an optional security cable (Kensington's).

The security lock corresponds to Kensington's MicroSaver Security System.
If you have any comment, contact
Kensington
2853 Campus Drive, San Mates, CA 94403
U.S.A.
Tel: 800-535-4242: extension 3348
Home page address: http://www.kensington.com/

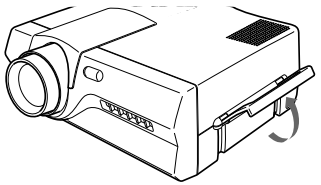
13 Speakers

14 Control panel
For details, see "Control panel" on page 11 (EN).

15 Lens hood

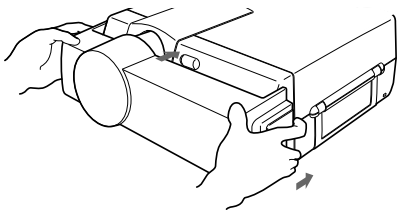
How to use the carrying handle

Pull up the handle from the projector for carrying.



How to attach the front cover

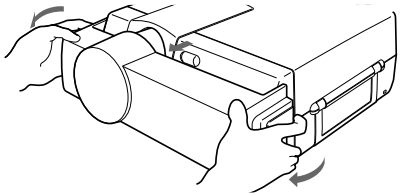
Attach the front cover on the front cabinet by stretching out both right and left sides on the front cover.



Notes
- Do not plug or turn on the projector when the front cover is attached.
- Do not hold the front cover when you carry the projector.

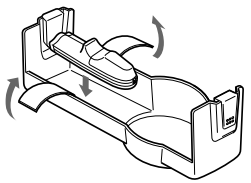
How to remove the front cover

Remove the front cover from the front cabinet by stretching out both right and left sides on the front cover.



How to install the Remote Commander in the front cover

Install the Remote Commander in the back of the front cover and fix it with the velcro tapes. When housing the Remote Commander, make sure that the infrared transmitter faces outside and rear faces upwards.



Note
Set the COMMAND ON/OFF switch on the Remote Commander to OFF before installing the Remote Commander.

Location and Function of Controls

❺ ENTER key
Enters the settings of items in the menu system.

❻ RESET key
Resets the value of an item back to its factory preset value. This key functions when the menu or a setting item is displayed on the screen.

❼ APA (Auto Pixel Alignment) key
Adjusts a picture to be projected clearest automatically while a signal from the computer is input.

❽ PATTERN key
Displays an H pattern on the screen for focus, zoom adjustments. Press again to clear the pattern.

❾ VOLUME +/– keys
Adjust the volume of the built-in speakers and output level of the AUDIO OUT jacks.
+ : Increases the volume.
– : Decreases the volume.

❿ LIGHT key
Lights the back lighting (orange) for the keys on the control panel when the power is turned on. Press again to turn off the back lighting.

⓫ Indicators
ON: Lights in green when the power is turned on. Flashes in green while the cooling fan runs after turning off the power with the I / ⏻ key. The fan runs for about 90 seconds after turning off the power.
The ON indicator flashes quickly for the first 30 seconds.
During this time, you cannot turn the power back on with the I / ⏻ key.

POWER SAVING: Lights up when the projector is in the power saving mode. When POWER SAVING in the SET SETTING menu is set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes. Although the lamp goes out, the cooling fan keeps running. In the power saving mode, any key does not function for the first 30 seconds. The power saving mode is canceled when a signal is input or any key is pressed.

STANDBY: Lights in red when the AC power cord is plugged into the wall outlet.
Once in the standby mode, you can turn on the projector with the I / ⏻ key on the Remote Commander or on the control panel.

TEMP (Temperature)/FAN: Lights up or flashes under the following conditions:
- Lights up when temperature inside the projector becomes unusually high.
- Flashes when the fan is broken.

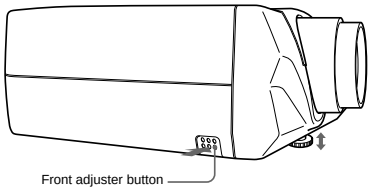
LAMP/COVER: Lights up or flashes under the following conditions:
- Lights up when the lamp has reached the end of its life.
- Flashes when the lamp cover or air filter cover is not secured firmly.

For details on the LAMP/COVER and the TEMP/FAN indicators, see page 39 (EN).

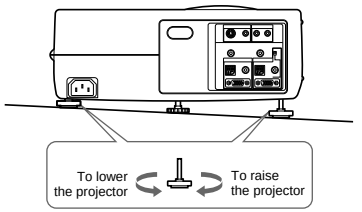
How to use the adjusters

While lifting the projector, adjust the height so that the projector becomes level.
There are one adjuster at the front and two at the rear of the projector.

As for the front adjuster, press the front adjuster button while lifting the projector to adjust the height. Turn the front adjuster for fine adjustment.

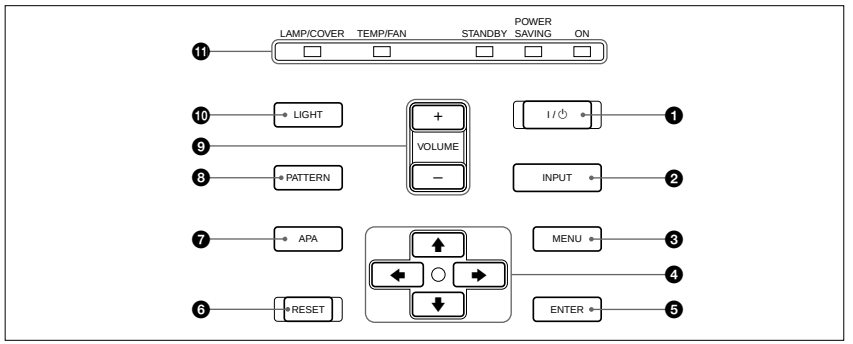


As for the rear adjusters, turn them for adjustment.



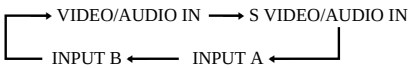
Notes
- Be careful not to let the projector down on your fingers.
- Do not push hard on the top of the projector with the adjusters out.
- Do not force the rear adjusters when you turn them. Using too much force may result in damage.

Control panel



❶ I / ⏻ (on / standby) key
Turns on and off the projector when the projector is in the standby mode. The ON indicator lights in green when the power is turned on.
When turning off the power, press the I / ⏻ key twice following the message on the screen, or press and hold the key for about one second.
For details on steps for turning off the power, see "To turn off the power" on page 24 (EN).

❷ INPUT key
Selects the input signal. Each time you press the key, the input signal switches as follows (When the RGB IN/OUT select switch is set to OUT, you cannot select INPUT B.):



Note on the VPL-X1000E model
The optional IFB-X600E Interface Board is required for VIDEO IN and AUDIO IN jacks.

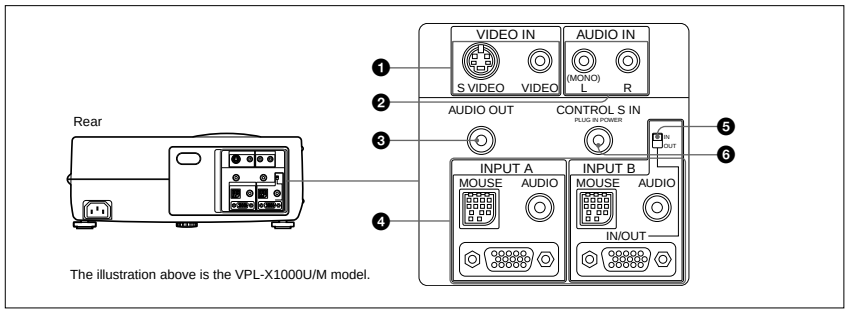
❸ MENU key
Displays the on-screen menu. Press again to clear the menu.

❹ Arrow keys (↑/↓/←/→)
Used to select the menu or to make various adjustments.

(Continued)

Location and Function of Controls

Connector panel



The illustration above is the VPL-X1000U/M model.

❶ VIDEO IN jacks
Connect to external video equipment such as a VCR.
S VIDEO (mini DIN 4-pin): Connects to the S video output (Y/C video output) of a video equipment.
VIDEO (phono type): Connects to the composite video output of video equipment.

❷ AUDIO IN L (MONO)/R jacks (phono type)
Connect to the audio output of equipment. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

❸ AUDIO OUT jack (stereo minijack)
Connects to external active speakers.
The volume of the speakers can be controled by the VOLUME keys on the Remote Commander or the control panel.

❹ INPUT A/INPUT B connectors
Connect to external equipment such as a computer. You can control the mouse signal with the Remote Commander.
MOUSE (13-pin): Connects to the mouse port on a computer to control the mouse function using the supplied mouse cable.
AUDIO (stereo minijack): Connects to the audio output on a computer to input the audio signal.

RGB input (INPUT A) / RGB IN/OUT (INPUT B) (HD D-sub 15-pin, female): Connects to the monitor output on a computer using the supplied cable. When inputting a component, or 15k RGB signal, use the optional cable.

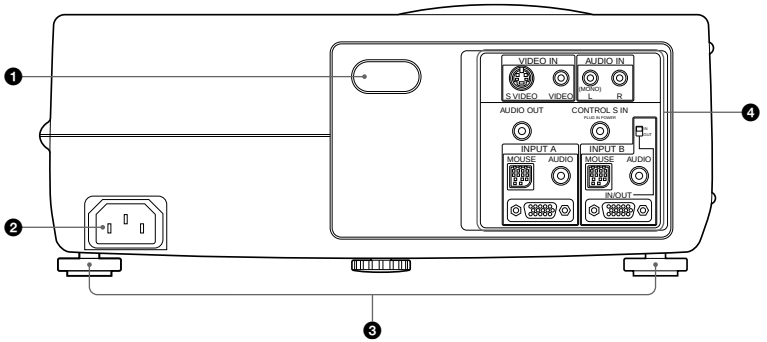
As for the RGB IN/OUT connector on INPUT B, you can use it as an output connecor with the RGB IN/OUT select switch. This connector outputs the signal which input through the RGB input connector on INPUT A.

❺ RGB IN/OUT select switch
Switches the input/output of the RGB IN/OUT connector on INPUT B.
IN: Functions as an input connector.
OUT: Functions as an output connector. The RGB IN/OUT connector outputs the signal which input through the RGB input connecor on INPUT A. The MOUSE connector and AUDIO jack on INPUT B do not function at this time.

❻ CONTROL S IN/PLUG IN POWER jack (DC 5 V output, stereo minijack)
Connects to the CONTROL S OUT jack on the supplied Remote Commander with the stereo connecting cable (not supplied) when using it as a wired Remote Commander. You do not need to install the batteries since the power is supplied via this jack. Batteries are required when you use the laser pointer function.

Note on the VPL-X1000E model
The optional IFB-X600E Interface Board is required for the VIDEO IN ❶ and AUDIO IN ❷ jacks.

Rear



The illustration above is the VPL-X1000U/M model.

❶ Rear remote control detector

❷ AC IN socket
Connects the supplied AC power cord.

❸ Rear adjusters
Used to keep the projector level if it is installed on an uneven surface.
For details on using the adjusters, see "How to use the adjusters" on page 11 (EN) .

❹ Connector panel
For details, see page 14 (EN).

⑩ CONTROL S OUT jack (stereo minijack)
Connects to the CONTROL S IN jack on the projector with the connecting cable (not supplied) when using the Remote Commander as a wired one. In this case, you do not need to install the batteries since the power is supplied via the CONTROL S IN jack on the projector.

⑪ ENTER key

⑫ MENU key

⑬ APA (Auto Pixel Alignment) key

⑭ MUTING keys
Cut off the picture and sound.
PICTURE: Cuts off the picture. Press again to restore the picture.
AUDIO: Cuts off the sound from speakers and AUDIO OUT jack. Press again or press the VOLUME + key to restore the sound.

⑮ COMMAND ON/OFF switch
When this switch is set to OFF, no key on the Remote Commander function. This saves the battery power.

⑯ Transmission indicator
Lights up when you press a key on the Remote Commander.
This indicator does not light up when you use the laser pointer.

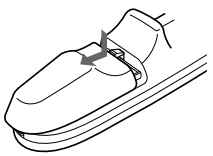
⑰ Infrared transmitter

⑱ Laser transmitter

⑲ L CLICK key
Functions as a left button on a mouse. When connected to a Macintosh computer, the L CLICK key functions as a mouse button.

Battery installation

1 Push and slide to open the lid.



2 Install the two size AA (R6) batteries (supplied) with the correct polarity.

3 Replace the lid.

Notes on batteries
- Make sure that the battery orientation is correct when inserting batteries.
- Do not mix an old battery with a new one, or different types of batteries.
- If you will not use the Remote Commander for a long time, remove the batteries to avoid damage from battery leakage. If batteries have leaked, remove them, wipe the battery compartment dry and replace the batteries with new ones.

Notes on wireless Remote Commander operation
- Make sure that there is nothing to obstruct the infrared beam between the Remote Commander and the remote control detector on the projector.
- The operation range is limited. The shorter the distance between the Remote Commander and the projector is, the wider the angle within which the commander can control the projector.
- The remote control detectors on the projector do not function when the connecting cable (not supplied) is connected to the projector. When using the Remote Commander as a wireless Remote Commander, remove the connecting cable from both the Remote Commander and the projector.

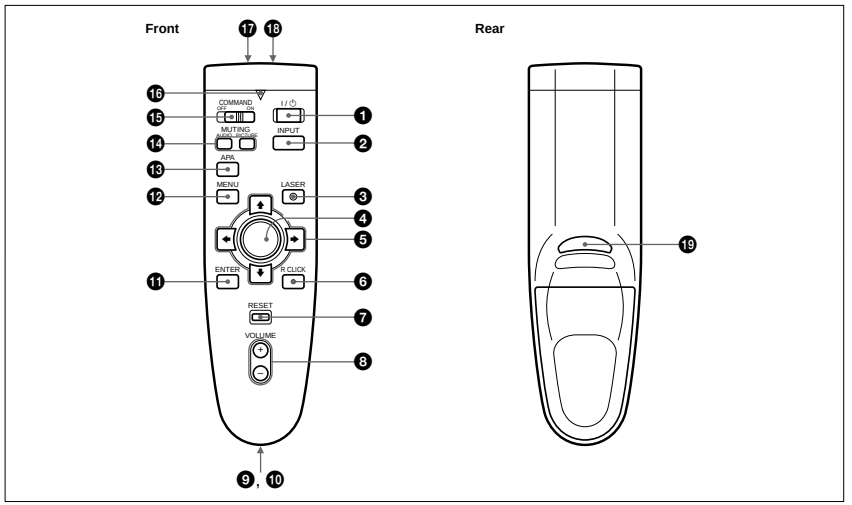
Note on wired Remote Commander operation
The laser pointer function does not work when you use the Remote Commander as a wired one without batteries.

Remote Commander

The Remote Commander can be used as a wireless or wired Remote Commander.
The keys which have the same names as on the control panel function identically.
You can control a connected computer using the Remote Commander.

For details, see "Connecting with a Computer" on page 18 (EN).

Notes on laser beam
- **Do not look into the laser transmitter.**
- **Do not aim the laser at people.**



❶ I / ⏻ key

❷ INPUT key

❸ LASER key
Emits laser beam from the laser transmitter when you press this key.

❹ Joy stick
Functions as a mouse of a computer connected to the unit.

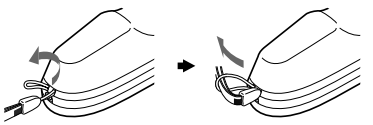
❺ Arrow keys (↑/↓/←/→)

❻ R CLICK key
Functions as a right button on a mouse. When connected to a Macintosh[1)] computer, the R CLICK key functions as a mouse button.

❼ RESET key

❽ VOLUME +/– keys

❾ Strap holder
Attaches the supplied strap.



(Continued)

1) Macintosh is a registered trademark of Apple Computer, Inc.

http://getMANUAL.com

Connecting

Note on the VPL-X1000E model
The optional IFB-X600E Interface Board is required for the VIDEO IN and AUDIO IN jacks.

Connecting with a Computer

This section describes how to connect the projector with a computer. For details on how to connect VCR, see page 20 (EN), and to connect other equipment, see page 21 (EN).

When the projector is connected to a computer, you can control the mouse of a computer by the Remote Commander.
The R/L CLICK keys and joy stick function as follows.

Note
Make sure that there is nothing to obstruct the infrared beam between the Remote Commander and the remoter control detector on the projector.

Key and joy stick	Function	
	IBM PC/AT[a] compatible, Serial	Macintosh
R CLICK (front)	Right button	Mouse button
L CLICK (rear)	Left button	Mouse button
Joy stick	Corresponds with the movements of the mouse	

a) IBM PC/AT is a registered trademark of International Business Machines Corporation, U.S.A.

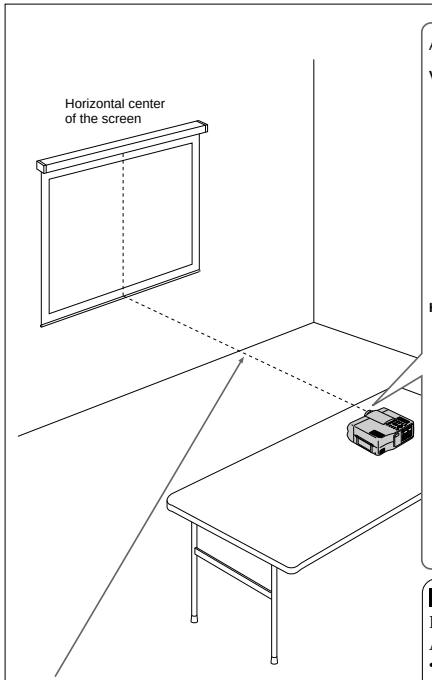
Also refer to the instruction manual of equipment to be connected.

Notes
- This unit accepts the VGA, SVGA, XGA, and SXGA signals. However, we recommend you to set the output mode of your computer to the XGA mode for the external monitor. (For Macintosh computer, set the output mode to 19-inch mode.)
- If you set your computer, such as a notebook type IBM PC/AT compatible, to output the signal to both the display of your computer and the external monitor, the picture of the external monitor may not appear properly. In such cases, set the output mode of your computer to output the signal to only the external monitor.
  For details, refer to the operating instructions supplied with your computer.

When making connections, be sure to:
- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.

Installing the Projector

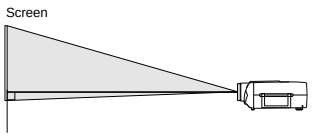
This section describes the installation arrangements for installing the projector on a table. For ceiling installation, consult with qualified Sony personnel (see page 34 (EN)).



The distance between the lens and the screen varies depending on the size of the screen. Use the following table as a guide.

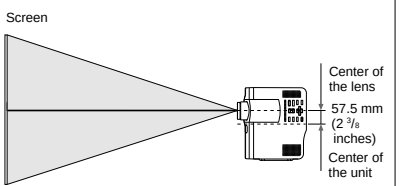
Adjust the vertical and horizontal positioning of the projector.

Vertical positioning (side view)



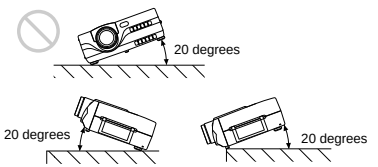
Adjust the height of the projector so that the center of the lens is just above the bottom edge of the screen.

Horizontal positioning (top view)



Adjust the horizontal positioning of the projector so that the lens is aligned with the horizontal center of the screen.

Note
Install the projector to be level.
Avoid followings which may cause malfunction.
- The projector topples over on its side.
- The projector titles more than 20 degrees.



Unit: m (feet)

Screen size (inches)		40	60	80	100	120	150	180	200	250	300
Distance	Minimum	1.6 (5.1)	2.4 (7.8)	3.2 (10.5)	4.0 (13.3)	4.9 (15.9)	6.1 (20.0)	7.3 (24.1)	8.2 (26.8)	10.2 (33.6)	11.2 (40.4)
	Maximum	2.0 (6.5)	3.0 (9.9)	4.1 (13.3)	5.1 (16.7)	6.1 (20.1)	7.7 (25.2)	9.2 (30.3)	10.3 (33.7)	12.9 (42.2)	15.5 (50.7)

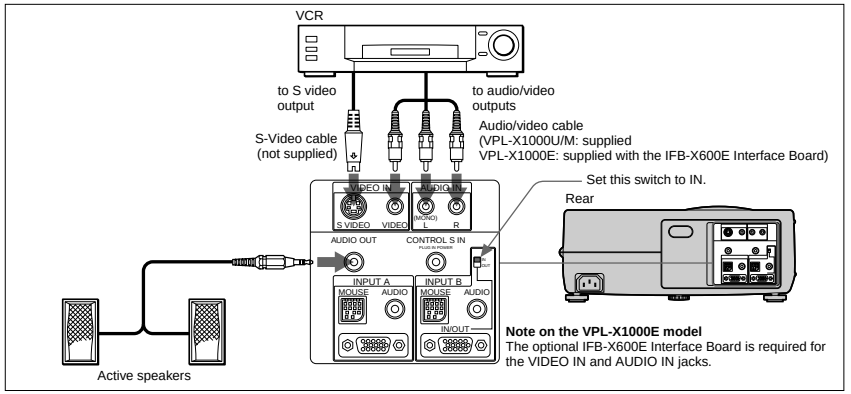
For detailed information on installation measurements, see page 33 (EN).

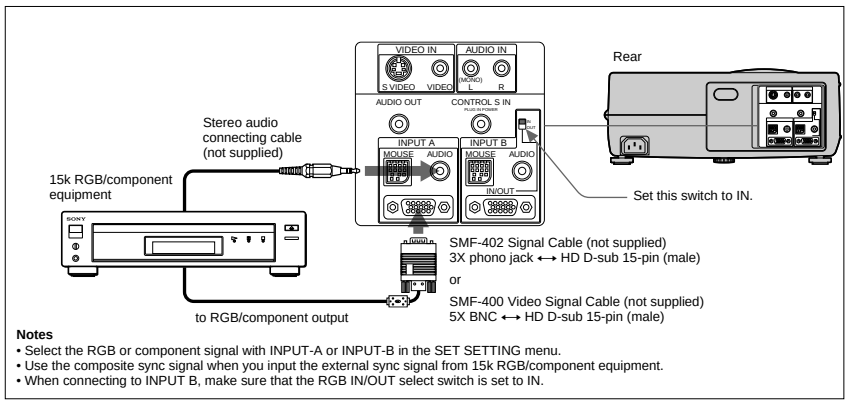
Connecting with a VCR, 15k RGB/Component Equipment

This section describes how to connect the projector with a VCR, external active speakers and 15k RGB/component equipment.
For details on how to connect a computer, see page 18 (EN).
Also refer to the instruction manuals of equipment to be connected.

When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.




Rear
Stereo audio connecting cable (not supplied)
15k RGB/component equipment
Set this switch to IN.
SMF-402 Signal Cable (not supplied)
3X phono jack ⟷ HD D-sub 15-pin (male)
or
SMF-400 Video Signal Cable (not supplied)
5X BNC ⟷ HD D-sub 15-pin (male)
to RGB/component output

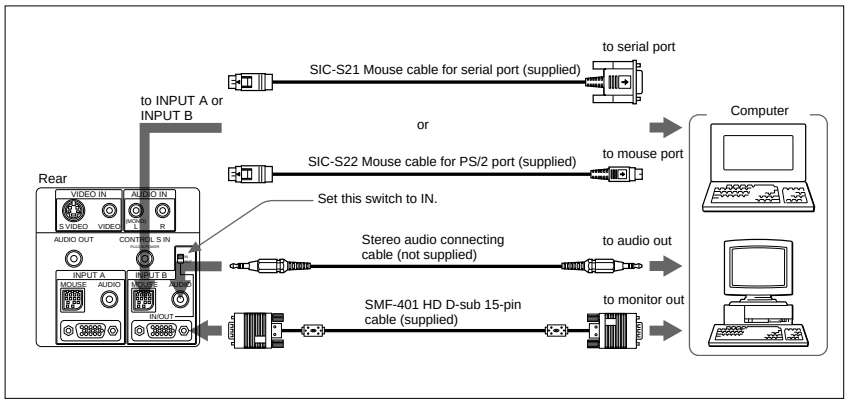
Notes

- Select the RGB or component signal with INPUT-A or INPUT-B in the SET SETTING menu.
- Use the composite sync signal when you input the external sync signal from 15k RGB/component equipment.
- When connecting to INPUT B, make sure that the RGB IN/OUT select switch is set to IN.

Notes

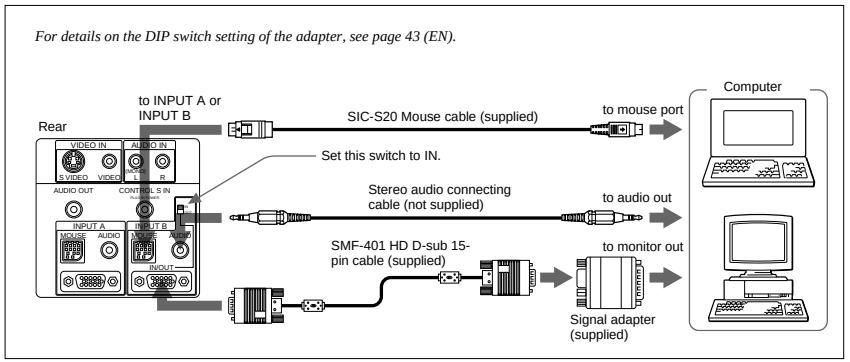
- Connect all the connecting cables to the INPUT A connector when you input a signal from the INPUT A connector.
  Connect all the cables to the INPUT B connector when you input a signal from the INPUT B connector as well.
- When connecting to INPUT B, make sure that the RGB IN/OUT select switch is set to IN.
- Supplied mouse cable may not work properly according to your computer.

When connecting with an IBM PC/AT compatible computer

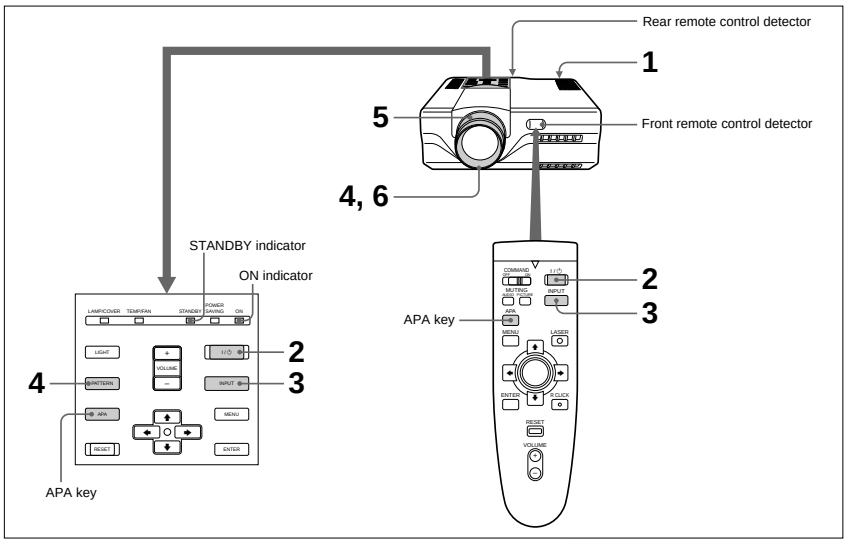

to serial port
SIC-S21 Mouse cable for serial port (supplied)
to INPUT A or INPUT B
or
Computer
SIC-S22 Mouse cable for PS/2 port (supplied)
to mouse port
Rear
Set this switch to IN.
Stereo audio connecting cable (not supplied)
to audio out
SMF-401 HD D-sub 15-pin cable (supplied)
to monitor out

When connecting with a Macintosh computer

For details on the DIP switch setting of the adapter, see page 43 (EN).



Projecting



1 After all equipment is connected completely, plug the AC power cord into the wall outlet.

The STANDBY indicator lights in red and the projector goes into the standby mode.

2 Press the I / ⏻ key on the Remote Commander or on the control panel.

The ON indicator lights in green.

3 Turn on equipment connected to the projector. Press the INPUT key on the Remote Commander or on the control panel to select the input source.

INPUT A: Selects audio and video signals input from the INPUT A connector.
INPUT B: Selects audio and video signals input from the INPUT B connector.
VIDEO: Selects audio and video signals input from the AUDIO IN/ VIDEO (VIDEO IN) jacks.
S VIDEO: Selects audio and video signals input from the AUDIO IN/ S VIDEO (VIDEO IN) jacks.

Note

The AUDIO IN jacks are used as audio outputs of both VIDEO and S VIDEO.

Note on the VPL-X1000E model

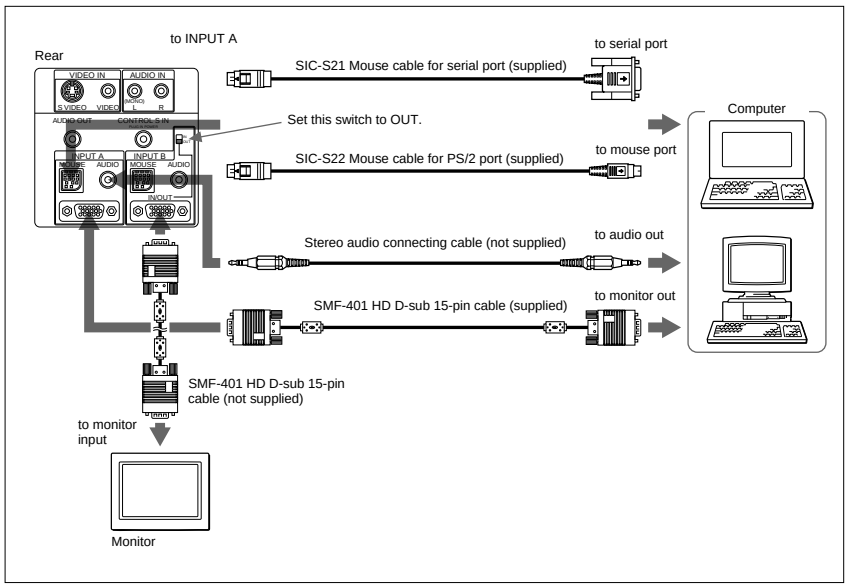
The optional IFB-X600E Interface Board is required for selecting VIDEO.

Using the RGB IN/OUT connector on INPUT B as a monitor output connector

This section describes connections when using the RGB IN/OUT connector on INPUT B as a monitor output connector.

When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.
- Make sure that the RGB IN/OUT select switch is set to OUT.



Note

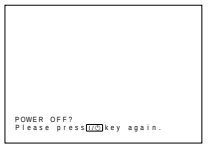
When the RGB IN/OUT select switch is set to OUT, the MOUSE connector and AUDIO jack on INPUT B do not function.

Projecting

To turn off the power

1 Press the I / ⏻ key on the Remote Commander or on the control panel.

The following message appears to confirm if you want to turn off the power.



Note

The message will disappear if you press any key except the I / ⏻ key, or if you do not press any key for five seconds.

2 Press the I / ⏻ key on the Remote Commander or on the control panel again.

The ON indicator flashes in green and the fan continues to run for about 90 seconds to reduce the internal heat. Also, the ON indicator flashes quickly for the first 30 seconds. During this time, you will not be able to turn the power back on with the I / ⏻ key.

3 Unplug the AC power cord from the wall outlet after the fan stops running and the STANDBY indicator lights in red.

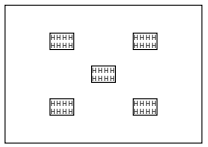
When you cannot confirm the on-screen message

When you cannot confirm the on-screen message in a certain condition, you can turn off the power by holding the I / ⏻ key on the Remote Commander or on the control panel for about one second.

Note

Do not unplug the AC power cord while the fan is still running; otherwise, the fan will stop although the internal heat is still high, leading to breakdown of the projector.

4 Press the PATTERN key on the control panel to display the H pattern, and turn the focus ring to adjust the focus.



Press the PATTERN key again to clear the pattern.

5 Turn the zoom ring to adjust the size of the picture.

6 Turn the focus ring again to adjust the focus.

Note

Do not look into the lens when the projector lamp is on.

To	Press
Adjust the volume	the VOLUME +/– keys on the control panel or on the Remoter Commander.
Cut off the sound	the AUDIO MUTING key on the Remote Commander. To restore the sound, press the AUDIO MUTING key again or press the VOLUME + key.
Cut off the picture	the PICTURE MUTING key on the Remote Commander. To restore the picture, press the PICTURE MUTING key again.

To get the clearest picture

You can get the suitable picture when a signal from the computer is input. Press the APA key on the Remote Commander or on the control panel. The picture is automatically adjusted to be projected clearest.

Notes

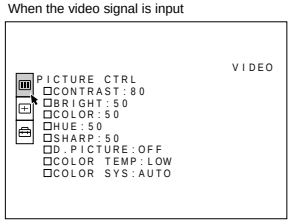
- Adjust the signal when the still picture is displayed on the screen.
- If you switch the input signal or re-connect a computer, press the APA key again to get the suitable picture.
- "ADJUSTING" appears on the screen. Press the APA key again during the adjustment to restore the original screen.
- "Complete!" appears on the screen when the picture is adjusted properly. The picture may not be adjusted properly depending on the kinds of input signals.
- Adjust DOT PHASE in the INPUT SETTING menu when you adjust the picture manually.
  For details on DOT PHASE, see page 28 (EN).

The PICTURE CTRL Menu

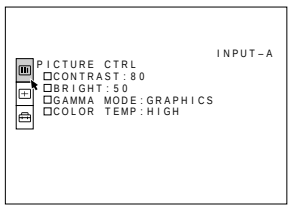
The PICTURE CTRL (control) menu is used for adjusting the picture.
Unadjustable items depending on the input signal are not displayed in the menu.

Note on the VPL-X1000E model
The optional IFB-X600E Interface Board is required for inputting the video signal. If you do not install the video board into the unit, the video signal cannot be selected.

When the video signal is input



When the RGB signal is input



Operation

1. Select an item
Use the ↑ or ↓ key to select the item, then press the → or ENTER key.

2. Adjust an item
- When changing the adjustment level:
  To increase the number, press the ↑ or → key.
  To decrease the number, press the ↓ or ← key.
  Press the ENTER key to restore the original screen.
- When changing the setting:
  Press the ↑ or ↓ key to change the setting.
  Press the ENTER or ← key to restore the original screen.

CONTRAST

Adjusts the picture contrast.

The higher the setting, the greater the contrast.
The lower the setting, the lower the contrast.

BRIGHT

Adjusts the picture brightness.

The higher the setting, the brighter the picture.
The lower the setting, the darker the picture.

COLOR

Adjusts color intensity.

The higher the setting, the greater the intensity.
The lower the setting, the lower the intensity.

HUE

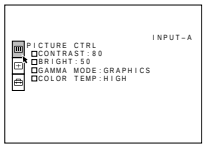
Adjusts skin tones.

The higher the setting, the picture becomes greenish.
The lower the setting, the picture becomes purplish.

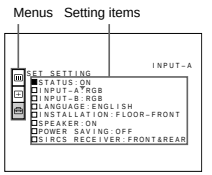
Using the MENU

The projector is equipped with an on-screen menu for making various adjustments and settings.
To select the language used in the menu, see page 32 (EN).

1 Press the MENU key.
The menu display appears.
The menu presently selected is highlighted in blue.



2 Use the ↑ or ↓ key to select a menu, then press the → or ENTER key.
The selected menu appears.



3 Make setting or adjustment on an item.
For details on setting individual items, see the relevant menu pages.

To clear the menu display

Press the MENU key.
The menu display disappears automatically if no key is pressed for one minute.

To reset items that have been adjusted

Press the RESET key.
"Complete!" appears on the screen and the settings appearing on the screen will be reset to their factory preset values.
Items which can be reset are:
- "CONTRAST", "BRIGHT", "COLOR", "HUE", and "SHARP" in the PICTURE CTRL menu
- "DOT PHASE", "SIZE", and "SHIFT" in the INPUT SETTING menu.

About the memory of the settings

The settings are automatically stored in the projector memory.

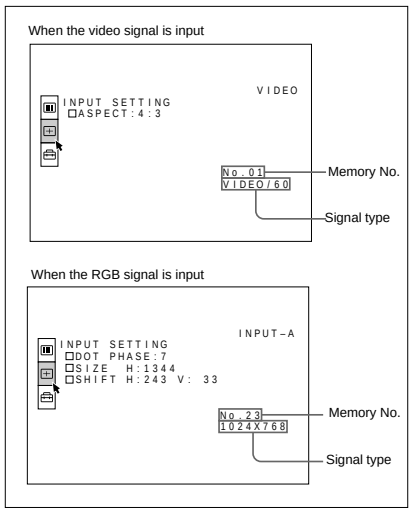
When no signal is input

When there is no input signal, "NO INPUT-Cannot adjust this item." appears on the screen, and each item cannot be adjusted.

The INPUT SETTING Menu

The INPUT SETTING menu is used to adjust the input signal.
Unadjustable items depending on the input signal are not displayed in the menu.

Note on the VPL-X1000E model
The optional IFB-X600E Interface Board is required for inputting the video signal. If you do not install the video board into the unit, the video signal cannot be selected.



Operation

1. Select an item
Use the ↑ or ↓ key to select the item, then press the → or ENTER key.

2. Adjust an item
- When changing the adjustment level:
  To increase the number, press the ↑ or → key.
  To decrease the number, press the ↓ or ← key.
  Press the ENTER key to restore the original screen.
- When changing the setting:
  Press the ↑ or ↓ key to change the setting.
  Press the ENTER or ← key to restore the original screen.

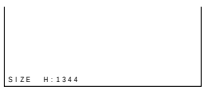
Note
When the HDTV signal is input, the items in the INPUT SETTING menu cannot be adjusted.

DOT PHASE

Adjusts the dot phase of the LCD panel and the signal input from the INPUT A/B connectors. Adjust the picture further for finer picture after the picture is adjusted with pressing the APA key.
Adjust the picture to where it looks clearest.

SIZE

Adjusts the horizontal size of picture input from the INPUT A/B connectors.



The higher the setting, the larger the horizontal size of the picture.
The lower the setting, the smaller the horizontal size of the picture. Adjust the setting according to the dots of the input signal. For details on the suitable value for the preset signals, see page 30 (EN).

SHIFT

Adjusts the position of the picture input from the INPUT A/B connectors.

H adjusts the horizontal position of the picture.
V adjusts the vertical position of the picture.
As the setting for H increases, the picture moves to the right, and as the setting decreases, the picture moves to the left.
As the setting for V increases, the picture moves up, and as the setting decreases, the picture moves down.
Use the ← or the → key to adjust the horizontal position and the ↑ and ↓ key for the vertical position.

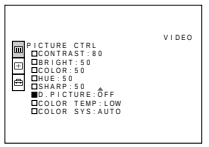
SHARP

Adjusts the picture sharpness.

The higher the setting, the sharper the picture.
The lower the setting, the softer the picture.

D. (Dynamic) PICTURE

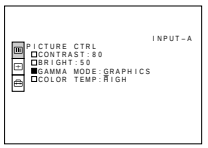
Emphasizes the black color.



ON: Emphasizes the black color to produce a bolder "dynamic" picture.
OFF: Reproduces the dark portions of the picture accurately, in accordance with the source signal.

GAMMA MODE

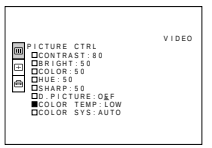
Selects a gamma correction curve.



GRAPHICS: Improves the reproduction of half tones. Photos can be reproduced in natural tones.
TEXT: Contrasts black and white. Suitable for images that contains lots of text.

COLOR TEMP

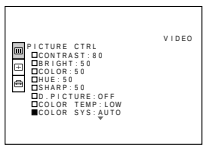
Adjusts the color temperature.



HIGH: Makes the white color bluish.
LOW: Makes the white color reddish.

COLOR SYS (System)

Selects the color system of the input signal.



Normally, set to AUTO.
If the picture is distorted or colorless, select the color system according to the input signal.

Input signals and adjustable/setting items

Item	Input signal			
	Video or S video (Y/C)	Component	RGB	B&W
CONTRAST	●	●	●	●
BRIGHT	●	●	●	●
COLOR	●	●	–	–
HUE	● (NTSC3.58/ 4.43 only)	–	–	–
SHARP	●	●	–	●
D. PICTURE	●	●	–	●
GAMMA MODE	–	–	●	–
COLOR TEMP	●	●	●	●
COLOR SYS	●	–	–	●

● : Adjustable/can be set
– : Not adjustable/can not be set

The INPUT SETTING Menu

Preset signals

Memory No.	Preset signal		fH (kHz)	fV (Hz)	Sync	SIZE
1	Video 60 Hz		15.734	59.940	H-neg V-neg	
2	Video 50 Hz		15.625	50.000	H-neg V-neg	
3	15k RGB/Component 60 Hz		15.734	59.940	H-neg V-neg	
4	15k RGB/Component 50 Hz		15.625	50.000	H-neg V-neg	
5	HDTV		33.750	60.000	H-neg V-neg	
6	640 × 350	VGA mode 1	31.469	70.086	H-pos V-neg	800
7		VGA VESA[a] 85 Hz	37.861	85.080	H-pos V-neg	832
8	640 × 400	PC-9801[b] Normal	24.823	56.416	H-neg V-neg	848
9		VGA mode 2	31.469	70.086	H-neg V-pos	800
10		VGA VESA 85 Hz	37.861	85.080	H-neg V-pos	832
11	640 × 480	VGA mode 3	31.469	59.940	H-neg V-neg	800
12		Macintosh 13"	35.000	66.667	H-neg V-neg	864
13		VGA VESA 72 Hz	37.861	72.809	H-neg V-neg	832
14		VGA VESA 75 Hz	37.500	75.000	H-neg V-neg	840
15		VGA VESA 85 Hz	43.269	85.008	H-neg V-neg	832
16	800 × 600	SVGA VESA 56 Hz	35.156	56.250	H-pos V-pos	1024
17		SVGA VESA 60 Hz	37.879	60.317	H-pos V-pos	1056
18		SVGA VESA 72 Hz	48.077	72.188	H-pos V-pos	1040
19		SVGA VESA 75 Hz	46.875	75.000	H-pos V-pos	1056
20		SVGA VESA 85 Hz	53.674	85.061	H-pos V-pos	1048
21	832 × 624	Macintosh 16"	49.724	74.550	H-neg V-neg	1152
22	1024 × 768	XGA VESA 43 Hz	35.522	43.479	H-pos V-pos	1264
23		XGA VESA 60 Hz	48.363	60.004	H-neg V-neg	1344
24		XGA VESA 70 Hz	56.476	70.069	H-neg V-neg	1328
25		XGA VESA 75 Hz	60.023	75.029	H-pos V-pos	1312
26		XGA VESA 85 Hz	68.677	84.997	H-pos V-pos	1376
27	1152 × 864	SXGA VESA 70 Hz	63.995	70.016	H-pos V-pos	1472
28		SXGA VESA 75 Hz	67.500	75.000	H-pos V-pos	1600
29		SXGA VESA 85 Hz	77.487	85.057	H-pos V-pos	1568
30	1152 × 900	Sunmicro LO	61.795	65.960	H-neg V-neg	1504
31		Sunmicro HI	71.713	76.047	H-neg V-neg	1472
32	1280 × 960	SXGA VESA 60 Hz	60.000	60.000	H-pos V-pos	1800
33		SXGA VESA 75 Hz	75.000	75.000	H-pos V-pos	1728
34	1280 × 1024	SXGA VESA 43 Hz	46.433	43.436	H-pos V-pos	1696
35		SGI-5	53.316	50.062	H-neg V-neg	1680
36		SXGA VESA 60 Hz	63.974	60.013	H-pos V-pos	1696
37		SXGA VESA 75 Hz	79.976	75.025	H-pos V-pos	1688
38		SXGA VESA 85 Hz	91.146	85.024	H-pos V-pos	1728

a) VESA is a registered trademark of Video Electronics Standard Association.
b) PC-98 is a registered trademark of NEC Corporation.

Since the data is recalled from the preset memory about the following signals, you can use these preset data by adjusting SIZE. Make fine adjustment by adjusting SHIFT.

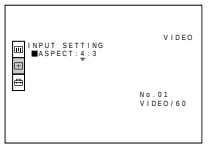
Signal	Memory No.	SIZE
Super Mac-2	23	1312
SGI-1	23	1320
Macintosh 19"	25	1328
Macintosh 21"	28	1456
Sony News	36	1708
PC-9821 1280 × 1024	36	1600
WS Sunmicro	37	1664

Note

When the aspect ratio of input signal is other than 4:3, a part of the screen is displayed in black.

ASPECT

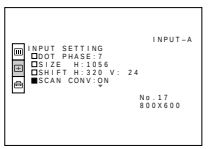
Sets the aspect ratio of the picture.
When inputting 16:9 (squeezed) signal from equipment such as a DVD player, set to 16:9.



4:3: When the picture with ratio 4:3 is input.
16:9: When the picture with ratio 16:9 (squeezed) is input.

SCAN CONV (Scan converter)

Converts the signal to display the picture according to the screen size.



ON: Displays the picture according to the screen size. The picture will lose some clarity.
OFF: Displays the picture while matching one pixel of input picture element to that of the LCD. The picture will be clear but the picture size will be smaller.

Note

When the XGA or SXGA signal is input, this item will not be displayed.

Input signals and adjustable/setting items

Item	Input signal			
	Video or S video (Y/C)	15k RGB Component	RGB	B&W
DOT PHASE	–	–	●	–
SIZE	–	–	●	–
SHIFT	–	–	●	–
ASPECT	●	●	–	●
SCAN CONV	–	–	●	–

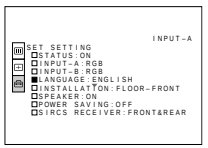
● : Adjustable/can be set
– : Not adjustable/can not be set

About the preset memory No.

This projector has 38 kinds of preset data for input signals for each INPUT A/B (the preset memory). The memory number of the current input signal and the signal type are displayed when the preset signal is input. This projector automatically detects the signal type. When the signal is registered to the preset memory, a suitable picture is displayed on the screen according to the signal type. You can adjust the picture through the INPUT SETTING menu.
This projector also has 20 kinds of user memories for each INPUT A/B. When an unpreset signal is input for the first time, memory number is displayed as 00. If the input signal is adjusted in the INPUT SETTING menu, the setting via INPUT A is stored under the memory number 51 to 70, and the setting via INPUT B is stored under 71 to 90. When more than 20 user memories are registered for each INPUT A/B, the newest memory is automatically stored over the oldest one.

LANGUAGE

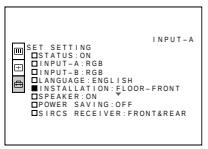
Selects the language used in the menu and on-screen displays.



Available languages are: English, French, German, Italian, Spanish, Japanese and Chinese.

INSTALLATION

Sets to reverse the picture horizontally or vertically.



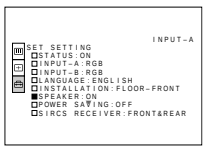
FLOOR-FRONT: The picture is not reversed.
CEILING-FRONT: The picture is reversed horizontally and vertically.
FLOOR-REAR: The picture is reversed horizontally.
CEILING-REAR: The picture is reversed vertically.

Note

In case of using a mirror, be careful of installation since the picture may be reversed.

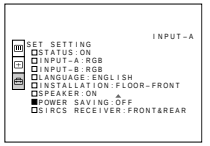
SPEAKER

Set to OFF to cut off the sound of the internal speakers. When set to OFF, “SPEAKER OFF” appears on the screen when you turn on the power.



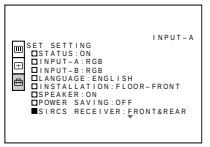
POWER SAVING

When set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes.



SIRCS RECEIVER

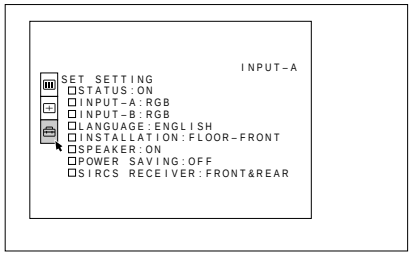
Selects the remote control detectors on the front and rear of the projector.



FRONT & REAR: Activates both the front and rear detectors.
FRONT: Activates the front detector only.
REAR: Activates the rear detector only.

The SET SETTING Menu

The SET SETTING menu is used for changing the settings of the projector.



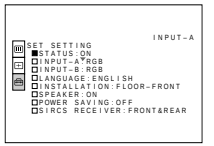
Operation

1. Select an item
Use the ↑ or ↓ key to select the item, then press the → or ENTER key.

2. Change the setting
Press the ↑ or ↓ key to change the setting.
To restore the original screen, press the ENTER or ← key.

STATUS (on-screen display)

Sets up the on-screen display.

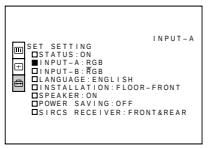


ON: Shows all of the on-screen displays.
OFF: Turns off the on-screen displays except for the menus, a message when turning off the power, and warning messages.

For details on the warning messages, see page 39 (EN).

INPUT-A

Selects the RGB or component signal input from the INPUT A connector.

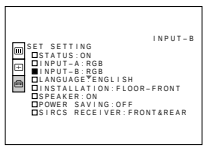


Note

If the setting is not correct, “Please check INPUT-A in SET SETTING.” appears on the screen and the color of the picture becomes strange or the picture is not displayed.

INPUT-B

Selects the RGB or component signal input from the INPUT B connector.



Note

If the setting is not correct, “Please check INPUT-B in SET SETTING.” appears on the screen and the color of the picture becomes strange or the picture is not displayed.

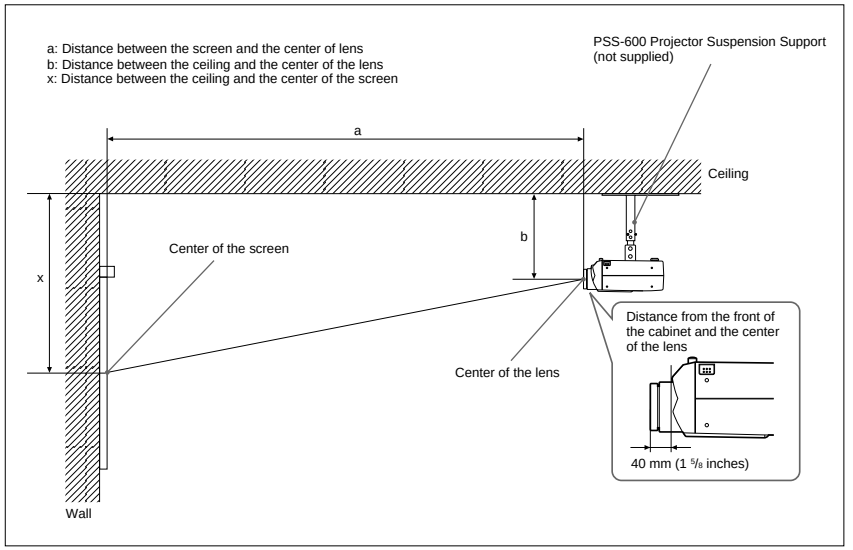
(Continued)

Installation Examples

Ceiling Installation

When installing the projector on the ceiling, use the PSS-600 Projector Suspension Support.

For ceiling installation, consult with qualified Sony personnel.


a: Distance between the screen and the center of lens
b: Distance between the ceiling and the center of the lens
x: Distance between the ceiling and the center of the screen
PSS-600 Projector Suspension Support (not supplied)
a
Ceiling
b
x
Center of the screen
Center of the lens
Distance from the front of the cabinet and the center of the lens
40 mm (1 5/8 inches)
Wall

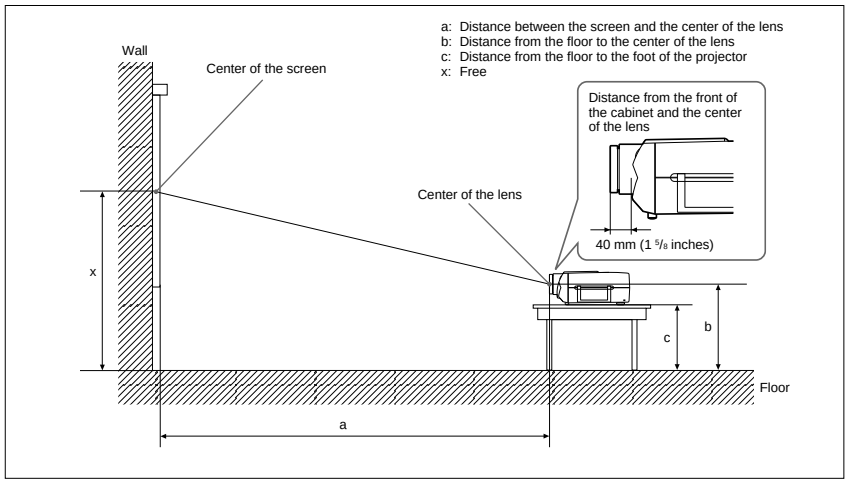
Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	3210 (126 1/2)	4040 (159 1/8)	4860 (191 3/8)	6100 (240 1/4)	7340 (289 1/8)	8170 (321 3/4)	10240 (403 1/4)	12300 (484 3/8)
	Maximum	4050 (159 1/2)	5090 (200 1/2)	6120 (241)	7680 (302 3/8)	9230 (363 1/2)	10270 (404 1/2)	12860 (506 3/8)	15450 (608 3/8)
x		b+580 (22 7/8)	b+725 (28 5/8)	b+870 (34 3/8)	b+1088 (42 7/8)	b+1305 (51 1/2)	b+1450 (57 1/8)	b+1813 (71 3/8)	b+2175 (85 3/4)
b		226/251/276/326/351/376 mm (9/10/10 7/8/12 7/8/13 7/8/14 7/8 inches) adjustable when using PSS-600							

To calculate the installation measurement (unit: mm)

SS: screen size diagonal (inches)
a (minimum) = {(SS × 52.83/1.3102) – 95.032} × 1.025
a (maximum) = {(SS × 69.64/1.3102) – 96.167} × 0.975
x = b + SS/1.3102 × 9.5

Floor Installation


a: Distance between the screen and the center of the lens
b: Distance from the floor to the center of the lens
c: Distance from the floor to the foot of the projector
x: Free
Wall
Center of the screen
Distance from the front of the cabinet and the center of the lens
Center of the lens
40 mm (1 5/8 inches)
x
c
b
Floor
a

Unit: mm (inches)

Screen size (inches)		40	60	80	100	120	150	180	200	250	300
a	Minimum	1560 (61 1/2)	2380 (93 3/4)	3210 (126 1/2)	4040 (159 1/8)	4860 (191 3/8)	6100 (240 1/4)	7340 (289 1/8)	8170 (321 3/4)	10240 (403 1/4)	12300 (484 3/8)
	Maximum	1980 (78)	3020 (118 15/16)	4050 (159 1/2)	5090 (200 1/2)	6120 (241)	7680 (302 3/8)	9230 (363 1/2)	10270 (404 3/8)	12860 (506 3/8)	15450 (608 3/8)
b		x–290 (11 1/2)	x–435 (17 1/4)	x–580 (22 7/8)	x–725 (28 5/8)	x–870 (34 3/8)	x–1088 (42 7/8)	x–1305 (51 1/2)	x–1450 (57 1/8)	x–1813 (71 3/8)	x–2175 (85 3/4)
c		x–373 (14 3/4)	x–518 (20 1/2)	x–663 (26 1/8)	x–808 (31 7/8)	x–953 (37 5/8)	x–1171 (46 1/8)	x–1388 (54 3/4)	x–1533 (60 3/8)	x–1896 (74 3/4)	x–2258 (89)

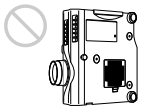
To calculate the installation measurement (unit: mm)

SS: screen size diagonal (inches)
a (minimum) = {(SS × 52.83/1.3102) – 95.032} × 1.025
a (maximum) = {(SS × 69.64/1.3102) – 96.167} × 0.975
b = x – SS/1.3102 × 9.5
c = x – (SS/1.3102 × 9.5 + 83.3)

Notes on Installation

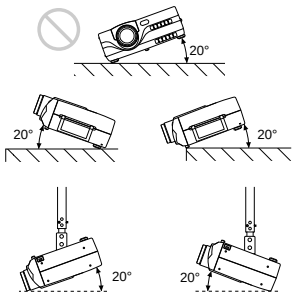
Carry out the followings.

No toppling of the unit



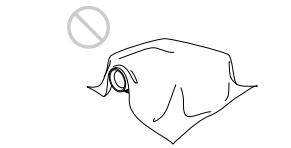
Avoid using as the unit topples over on its side. It may cause malfunction.

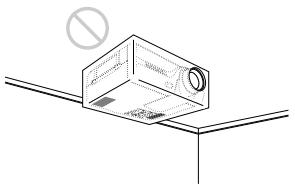
Use to be level



Avoid using as the unit tilts more than 20 degrees. Do not install the unit other than on the floor or ceiling. These installation may cause malfunction.

No blocking the ventilation holes





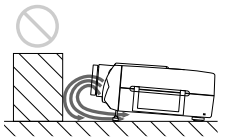
Avoid using something to cover over the front ventilation holes; otherwise, the internal heat may build up.

Use the supplied front cover only when the power is turned off. Do not turn on the projector with the front cover on. It may cause malfunction.

Unsuitable Installation

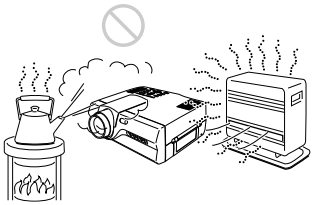
Do not install the projector in the following situations. These installations may cause mulfunction or damage to the projector.

Poorly ventilated



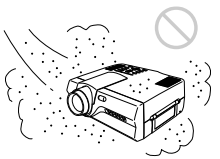
- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes. When the internal heat builds up due to the block-up, the temperature sensor will function with the message “High Temperature! Power off in 1 min.” The power will be turned off automatically after one minute.
- Leave space of more than 30 cm (11 7/8 inches) around the front ventilation holes.
- Be careful that the bottom ventilation holes may inhale tininess such as a piece of paper.
- If you put something in front of the front ventilation holes, the exhaust may be inhaled into the projector through the ventilation holes at the bottom, causing the internal temperature to rise, which activates the protection circuit. Install the projector so that the exhaust is not blocked.

Highly heated and humid



- Avoid installing the unit in a location where the temperature or humidity is very high, or temperature is very low.
- To avoid moisture condensation, do not install the unit in a location where the temperature may rise rapidly.

Very dusty



Avoid installing the unit in a location where there is a lot of dust; otherwise, the air filter will be obstructed. The dust blocking the air through the filter may cause raising the internal heat of the projector. Clean it up periodically.

http://getMANUAL.com

Troubleshooting

If the projector appears to be operating erratically, try to diagnose and correct the problem, using the following guide. If the problem still persists, consult with qualified Sony personnel.

Symptom	Cause	Remedy
The power is not turned on.	The power has been turned off and on with the I / ⏻ key at a short interval.	Wait for about one minute before turning on the power *(see page 22 (EN)).*
	The lamp cover is detached.	Close the lamp cover securely.
	The air filter cover is detached.	Close the air filter cover securely *(see page 37 (EN)).*
No picture and no sound.	Cable is disconnected.	Check that the proper connections have been made *(see pages 18 (EN) to 21 (EN)).*
	Wrong connection.	Check that the proper connections have been made *(see pages 18 (EN) to 21 (EN)).*
	Input selection is incorrect.	Select the input source correctly using the INPUT key *(see page 22 (EN)).*
No picture or no sound.	Either the picture or the sound is cut off.	Press the MUTING keys to release the muting function *(see page 23 (EN)).*
No picture.	The computer signal is not set to output to external monitor.	Set the computer signal to output to external monitor *(see page 18 (EN)).*
	The computer signal is set to output to both the LCD of the computer and external monitor.	Set the computer signal to output only to external monitor *(see page 18 (EN)).*
The picture is noisy.	Noise may appear on the background depending on the combination of the numbers of dot input from the connector and numbers of pixel on the LCD panel.	Change the desktop pattern on the connected computer.
When inputting sound through INPUT A/B connector, sound comes through one channel only.	Monaural sound is being input through the INPUT A/B connector.	Input stereo sound.
The picture from INPUT A/B connector is colored strange.	Setting for INPUT-A/INPUT-B in the SET SETTING menu is incorrect.	Select RGB or COMPONENT for INPUT-A or INPUT-B in the SET SETTING menu according to the input signal *(see page 31 (EN)).*
"Please check INPUT-A in SET SETTING." appears in spite of inputting the correct signal from INPUT A.	Setting for INPUT-A in the SET SETTING menu is incorrect.	Select RGB or COMPONENT for INPUT-A in the SET SETTING menu according to the input signal *(see page 31 (EN)).*
"Please check INPUT-B in SET SETTING." appears in spite of inputting the correct signal from INPUT B.	Setting for INPUT-B in the SET SETTING menu is incorrect.	Select RGB or COMPONENT for INPUT-B in the SET SETTING menu according to the input signal *(see page 31 (EN)).*
"NO INPUT" appears when 15k RGB or component signal is input.	The sync signal is incorrect.	Input the correct sync signal (composite sync or sync on G signal (sync on Y for component signal)).
On-screen displays do not appear.	STATUS in the SET SETTING menu has been set to OFF.	Set STATUS in the SET SETTING menu to ON *(see page 31 (EN)).*
Color balance is incorrect.	Picture has not been adjusted properly.	Adjust the picture *(see pages 26 (EN) and 27 (EN)).*
	Projector is set to wrong color system.	Set COLOR SYS in the PICTURE CTRL menu to match the color system being input *(see page 27 (EN)).*
The picture is too dark.	Contrast or brightness has not been adjusted properly.	Adjust the contrast or brightness in the PICTURE CTRL menu properly *(see page 26 (EN)).*
The picture is not clear.	Picture is out of focus.	Adjust the focus *(see page 23 (EN)).*
	Condensation has occurred on the lens.	Leave the projector for about two hours with the power on *(see page 35 (EN)).*

Maintenance

Note on the Time to Replace the Lamp

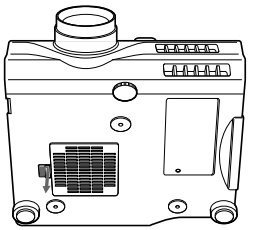
When it is time to replace the lamp, replace the lamp promptly with a new LMP-600 Projector Lamp.
For details on replacement, refer to the instruction manual supplied with the LMP-600 Projector Lamp.

Cleaning the Air Filter

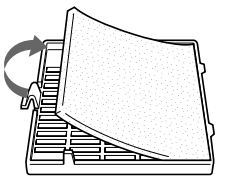
The air filter should be cleaned every 300 hours. When it becomes difficult to remove the dust from the filter, replace the filter with a new one.
To clean the air filter, follow the steps below:

1 Turn off the power and unplug the power cord.

2 Remove the air filter cover on the bottom of the projector.



3 Remove the air filter.



4 Remove the dust from the filter with a vacuum cleaner.

5 Attach the air filter and replace the cover.

Notes

- If the air filter is excessively dirty, wash it with a mild detergent solution and dry it in a shaded place. If the dust cannot be removed, replace the air filter with the supplied new one.
- Be sure to attach the air filter cover firmly; the power will not be turned on if it is not closed securely.

Specifications

Optical characteristics

Projection system 3 LCD panels, 1 lens, projection system
LCD panel 1.3-inch TFT LCD panel, 2, 359, 296 pixels (786, 432 pixels × 3)
Lens 1.3 times zoom lens f 54 to 70 mm/F 2.0 to 2.4
Lamp 120 W UHP
Projection picture size
Range: 40 to 300 inches (diagonal measure)
Light output ANSI lumen[1] 1000 lm
Throwing distance (1024 × 768 dots display)
40-inch: 1560 to 1980 mm (61 1/2 to 78 inches)
80-inch: 3210 to 4050 mm (126 1/2 to 159 1/2 inches)
100-inch: 4040 to 5090 mm (159 1/8 to 200 1/2 inches)
120-inch: 4860 to 6120 mm (191 3/8 to 241 inches)
200-inch: 8170 to 10270 mm (321 3/4 to 404 3/8 inches)
300-inch: 12300 to 15450 mm (484 3/8 to 608 3/8 inches)

Electrical characteristics

Color system $NTSC_{3.58}$/PAL/SECAM/$NTSC_{4.43}$/PAL-M system, switched automatically/manually
Resolution 750 horizontal TV lines (Video input)
1024 × 768 dots (RGB input)
Acceptable computer signals
fH:15, 24 to 91 kHz
fV:43 to 85 Hz
Speaker Wide frequency range 3 speakers system,
Woofer: 57 mm (2 1/4 inches) diameter, max. 1 W
Tweeter: 28 mm (1 1/8 inches) diameter, max. 0.2 W × 2 (stereo)

Input/Output

VIDEO IN (only for VPL-X1000U/M)
VIDEO: phono type
Composite video: 1 Vp-p ±2 dB sync negative (75 ohms terminated)
S VIDEO: Y/C mini DIN 4-pin type (male)
Y (luminance): 1 Vp-p ±2 dB sync negative (75 ohms terminated)
C (chrominance): burst 0.286 Vp-p ±2 dB (NTSC) (75 ohms terminated), burst 0.3 Vp-p ±2 dB (PAL) (75 ohms terminated)
AUDIO IN (only for VPL-X1000U/M)
Phono type × 2
500 mVrms, impedance more than 47 kilohms
INPUT A/INPUT B
HD D-sub15-pin (female)
Analog RGB/component:

When using as input
R/R-Y: 0.7 Vp-p ±2 dB (75 ohms terminated)
G: 0.7 Vp-p ±2 dB (75 ohms terminated)
G with sync/Y: 1 Vp-p ±2 dB sync negative (75 ohms terminated)
B/B-Y: 0.7 Vp-p ±2 dB (75 ohms terminated)
SYNC/HD:
Composite sync input: 1-5 Vp-p high impedance, positive/negative
Horizontal sync input: 1-5 Vp-p high impedance, positive/negative
VD:
Vertical sync input: 1-5 Vp-p high impedance, positive/negative

When using as output (INPUT B only) (input/output switching, outputs signal input from RGB connector on INPUT A)
R/R-Y: Gain unity (75 ohms terminated)
G: Gain unity (75 ohms terminated)
B/B-Y: Gain unity (75 ohms terminated)
SYNC/HD: Composite sync output 4Vp-p (open), 1Vp-p (75 ohms input)
Horizontal sync output 4Vp-p (open) 1Vp-p (75 ohms input)
VD: Vertical sync output 4Vp-p (open) 1Vp-p (75 ohms input)
MOUSE (output): 13-pin (female)
(For details, see "Pin assignment" on page 42 (EN).)

1) ANSI lumen is a measuring method of American National Standard IT 7.228.

Symptom	Cause	Remedy
The LAMP/COVER indicator flashes.	The lamp cover or the air filter cover is detached.	Attach the cover securely *(see page 37 (EN)).*
The LAMP/COVER indicator lights up.	The lamp has reached the end of its life.	Replace the lamp *(see page 37 (EN)).*
The TEMP/FAN indicator flashes.	The fan is broken.	Consult with qualified Sony personnel.
The TEMP/FAN indicator lights up.	The internal temperature is unusually high.	Check to see if nothing is blocking the ventilation holes.
The Remote Commander does not work.	The Remote Commander batteries are dead.	Replace with new batteries *(see page 16 (EN)).*
	The COMMANDER ON/OFF switch is set to the OFF position.	Set the switch to ON position *(see page 16 (EN)).*
	You are using the Remote Commander as a wireless Remote Commander, and it is connected to the projector.	Disconnect the cable.
	The front/rear remote commander detector is near the fluorescent lamp.	Change the setting of SIRCS RECEIVER in the SET SETTING menu *(see page 32 (EN)).*
The laser pointer is not emitted.	The batteries are dead.	Replace with new batteries *(see page 16 (EN)).*
	The Remote Commander is used as wired without batteries.	Install batteries *(see page 16 (EN)).*
The joystick, R CLICK, or L CLICK key does not function.	The mouse port on the computer does not recognize the mouse cable.	Restart the computer.

Warning messages

Use the list below to check the meaning of the messages displayed on the screen.

Message	Meaning	Remedy
High Temperature! Power off in 1 min.	Internal temperature is too high.	Turn off the power. Check to see if nothing is blocking the ventilation holes.
Frequency is out of range!	This input signal cannot be projected as the frequency is out of the acceptable range of the projector.	Input a signal that is within the range of the frequency.
	The resolution setting of the output signal of a computer is too high.	Set the setting of output to the XGA.
Please check INPUT-A in SET SETTING.	You have input RGB signal from the computer when INPUT-A in the SET SETTING menu is set to COMPONENT.	Set INPUT-A correctly.
Please check INPUT-B in SET SETTING.	You have input RGB signal from the computer when INPUT-B in the SET SETTING menu is set to COMPONENT.	Set INPUT-B correctly.

Caution messages

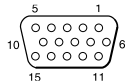
Use the list below to check the meaning of the messages displayed on the screen.

Message	Meaning	Remedy
NO INPUT	No input signal	Check connections.
Not applicable!	You have pressed the wrong key.	Press the appropriate key.

Specifications

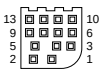
Pin assignment

RGB input (INPUT A)/RGB IN/OUT (INPUT B) connector (HD D-sub 15-pin, female)



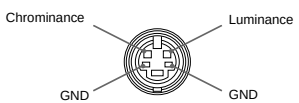
1	R/R-Y	9	N.C.
2	G/Y	10	GND
3	B/B-Y	11	GND
4	N.C.	12	N.C.
5	GND	13	HD/C.Sync
6	GND (R)	14	VD
7	GND (G)	15	N.C.
8	GND (B)		

MOUSE connector (13-pin, female)



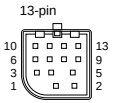
1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

S VIDEO jack (4 pin, mini-DIN)



Mouse cable pin assignment

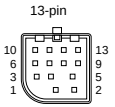
SIC-S20

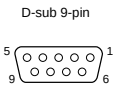


1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

1	ADB
2	NC
3	+5V
4	GND

SIC-S21

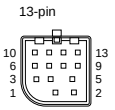




1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

SIC-S22



1	RTS	8	R
2	GND	9	98/AT/TXD
3	XA	10	+5V/DTR
4	XB	11	CLOCK
5	YA	12	DATA
6	YB	13	RXD
7	L/PS		

1	DATA
2	NC
3	GND
4	+5V
5	CLOCK
6	NC

AUDIO: Stereo minijack
500 mVrms, impedance more than 47 kilohms
AUDIO OUT (variable out): stereo minijack
Max. 1 Vrms, when an output signal is 500 mVrms, impedance less than 5 kilohms
CONTROL S IN/PLUG IN POWER
Stereo minijack
5 Vp-p, plug in power, DC 5 V maximum output 60 mA
Safety regulations VPL-X1000U: UL1950, cUL (CSA C22.2 No.950), FCC Class A, IC Class A, DHHS
VPL-X1000E/X1000M: EN60 950 EN60825-1, CE, C-Tick

Laser beam

Laser type	Class 2
Wavelength	645 nm
Output	1 mW

General

Dimensions 333 × 120 × 291 mm (13 1/4 × 4 3/4 × 11 1/2 inches) (w/h/d) (excluding lens, adjusters, and protruding parts)
339 × 136 × 322 mm (13 3/8 × 5 3/8 × 12 3/4 inches) (w/h/d)
Mass Approx. 5.9 kg (13 lb)
Power requirements
AC 100 to 120 V/220 to 240 V, 2A/0.9A, 50/60 Hz
Power consumption
Max. 220 W (Standby mode: 2 W)
Heat dissipation 750.7 BTU
Operating temperature
0°C to 40°C (32°F to 104°F)
Operating humidity
35% to 85% (no condensation)
Storage temperature
–20°C to 60°C (–4°F to 140°F)
Storage humidity 10% to 90%
Supplied accessories
Remote Commander RM-PJM600 (1)
Size AA (R6) batteries (2)
Video Signal Cable SMF-401 (1)
Signal Adapter (for Macintosh) (1)
Mouse Cable
SIC-S20 (for Macintosh) (2 m) (1)
SIC-S21 (for Serial) (2 m) (1)
SIC-S22 (for PS/2) (2 m) (1)
Audio/video cable (1.5 m) (1) (except for VPL-X1000E)
Strap for Remote Commander (1)
AC power cord (1)
Lens cap (1)
Front cover (1)
Air filter (for replacement) (1)
Operating Instructions (1)
Installation Manual for Dealers (1)
Quick Reference Card (1)
Warranty Card (1) (only for VPL-X1000U)

Design and specifications are subject to change without notice.

Optional accessories

Projector Lamp LMP-600[1)] (for replacement)
Projector Suspension Support PSS-600
Interface Board IFB-X600E (only for VPL-X1000E)
Video Signal Cable
SMF-400 (HD D-sub 15-pin (male) ⟷ 5 × BNC (male))
SMF-401 (HD D-sub 15-pin (male) ⟷ HD D-sub 15-pin (male))
Signal Cable
SMF-402 (HD D-sub 15-pin (male) ⟷ 3 × phono type (male))
Mouse Cable
SIC-S20 (for Macintosh) (2 m)
SIC-S21 (for Serial) (2 m)
SIC-S22 (for PS/2) (2 m)
Signal Adapter ADP-20 (Macintosh ⟷ HD D-sub 15-pin)
Projection Lens
2 times Zoom Long Focus Lens VPLL-ZM100
Fixed Short Focus Lens VPLL-FM20
Fixed Short Focus Lens VPLL-FM30
Carrying Case VLC-600[1)]
Screens
50-inch Portable VPS-50C
80-inch Portable VPS-80C
100-inch Flat Screen VPS-100FH
120-inch Flat Screen VPS-120FH

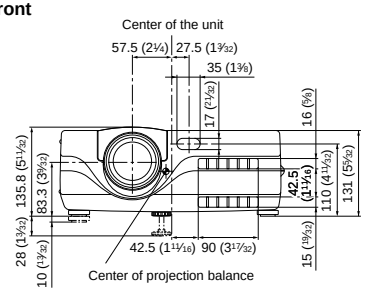
Some of the items may not be available in some areas. For details, please consult your nearest Sony office.

1) LMP-600 and VLC-600 may not be available in some areas. For details, please consult your nearest Sony office.

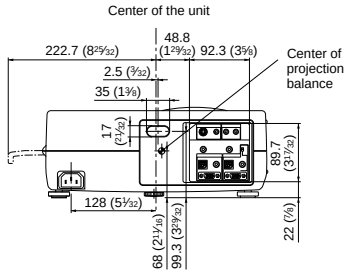
Specifications

Dimensions

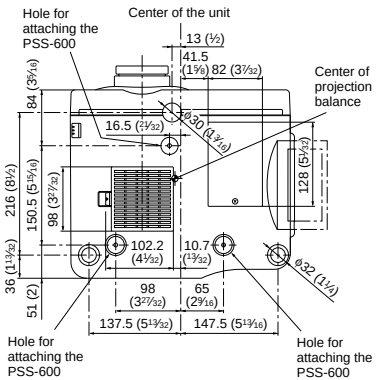
Front



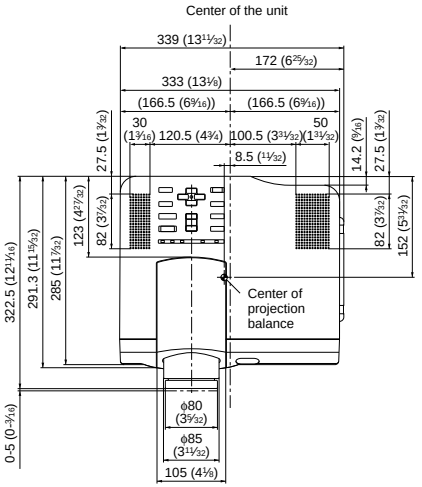
Rear



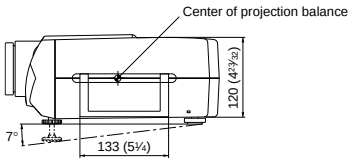
Bottom



Top

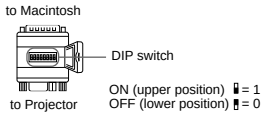


Side



Unit: mm (inches)

Switch position for signal adapter



Mode	fH	DIP switch 12345678
VGA/S VGA	31.5 kHz/37.8 kHz	00111001
Macintosh 13”	35.0 kHz	11001001
Macintosh 16”	49.7 kHz	01011001
Macintosh 19”	60.2 kHz	01101001
Macintosh 21”	68.7 kHz	11111001
Macintosh 1280 × 960	75.0 kHz	11001101
Macintosh 1280 × 1024	75.0 kHz	11001101

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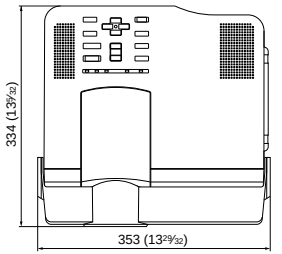

Unit: mm (inches)

SONY

3-862-351-**13** (1)

LCD Data Projector

Installation Manual for Dealers EN

Manuel d'installation destiné aux revendeurs F

Manual de instalación para proveedores ES

VPL-X600U/X600E/X600M
VPL-S600U/S600E/S600M
VPL-X1000U/X1000E/X1000M
VPL-S900U/S900E/S900M

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English

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Precautions

On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply. If voltage adaptation is required, consult with qualified Sony personnel.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified Sony personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Do not look into the lens while the lamp is on.
- Do not place your hand or objects near the ventilation holes — the air coming out is hot.
- Avoid using an extension cord with a low voltage limited since it may cause the short-circuit and physical incidents.
- To carry the projector, be sure to use the carrying handle. Do not hold other parts of the projector, especially the lens, nor catch your finger between the handle, floor, and the projector.
- Do not catch your finger between the unit and surface of the floor when moving the projector installed on the floor.
- Be careful not to catch your finger in the cooling fan.
- Do not carry the projector with the cabinet on and with its cover open.

On installation

- When the projector is mounted on the ceiling, the Sony PSS-600 Projector Suspension Support must be used for installation.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes. Leave space of more than 30 cm (11 7/8 inches) between the wall and the projector. Be aware that room heat rises to the ceiling; check that the temperature near the installation location is not excessive.
- Install the projector on the floor or ceiling. Any other installation causes a mulfunction such as color irregularity or shortening lamp life.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity, mechanical vibration or shock.
- To avoid moisture condensation, do not install the unit in a location where the temperature may rise rapidly.
- Be sure to secure the cabinet cover firmly when installing to the ceiling firmly.

Precautions

On illumination

- To obtain the best picture, the front of the screen should not be exposed to direct lighting or sunlight.
- Ceiling-mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering the contrast ratio.
- Cover any windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

On preventing internal heat build-up

- After you turn off the power with the I / ⏻ key on the control panel or on the Remote Commander, do not disconnect the unit from the wall outlet while the cooling fan is still running.
- Do not disconnect the AC power cord from the wall outlet while the fan is still running.

Caution

The projector is equipped with ventilation holes (intake) at the bottom and ventilation holes (exhaust) at the front. Do not block or place anything near these holes, or internal heat build-up may occur, causing picture degradation or damage to the projector.

On cleaning

- To keep the cabinet looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner, benzene, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.
- Clean the filter at regular intervals.

On repacking

- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

Overview

This manual describes how to install the Sony LCD Data Projector VPL-X600U/E/M, VPL-S600U/E/M, VPL-X1000U/E/M and VPL-S900U/E/M, how to replace the lens, how to change the lens position for rear projection (optical axis angle: 0 degree), and installation diagrams. When you replace the lens or change the lens position, also refer to the Operating Instructions.

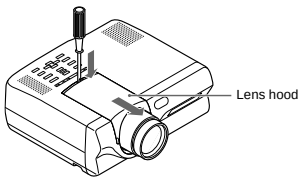
Replacing the Lens

You can install the following two types of lenses in the projector.
• VPLL-ZM100 2 times Zoom long focus lens
• VPLL-FM30 Fixed short focus lens

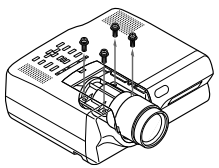
Follow the steps below to replace the lens.
For details on replacing the lens, also refer to the installation manual supplied with the lens.

1 Turn off the power and disconnect the power cable.

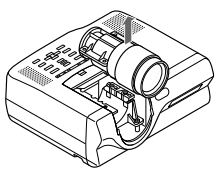
2 Remove the lens hood. To remove the lens hood, insert a screwdriver into the lens hood slit then lightly push down on the hood with the screwdriver and slide the lens hood forward.



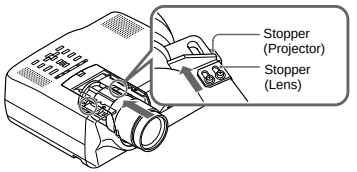
3 Remove the four screws (M4×12, with washers) locking the lens by using a Philips screwdriver.



4 Lift and remove the lens.



5 Install the lens with the lens stopper and the projector stopper met at their edges.

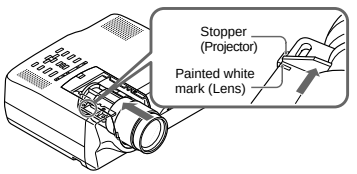


Note

For ease in identification when you install the lens, make sure that the label on the lens is facing up.

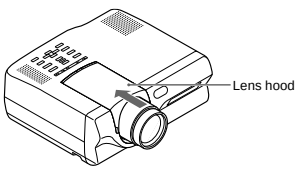
When the lens does not have a stopper

Align the painted white mark (▭) on the lens with the edge of the stopper in the projector.



6 Tighten the four screws to secure the replacement lens firmly.

7 Install the lens hood by sliding it from front to back until it snaps into the lock position.



Notes

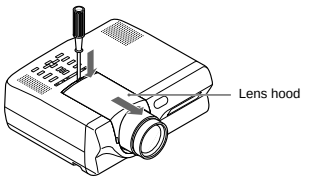
• The lens scratches easily, so when handling it, always place it gently on a stable and level surface in a horizontal position.
• Avoid touching the lens surface.

Changing the Lens Position for Rear Projection (Optical Axis Angle: 0 degree)

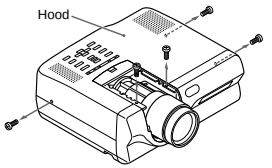
For rear projection, you can set the optical axis angle to 0 (zero). In this case, you will need to set the lens position as follows.
You can install the following types of lenses for a zero optical axis angle.
• Standard lens
• VPLL-ZM100 2 times Zoom long focus lens
• VPLL-FM30 Fixed short focus lens
• VPLL-FM20 Fixed short focus lens

1 Turn off the power and disconnect the power cable.

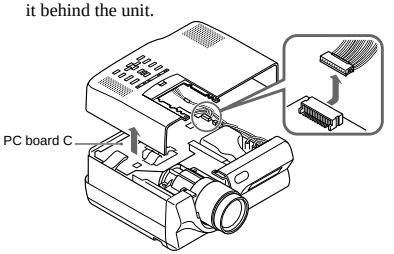
2 Remove the lens hood. To remove the lens hood, insert a screwdriver into the lens hood slit then lightly push down on the hood with the screwdriver and slide the lens hood forward.



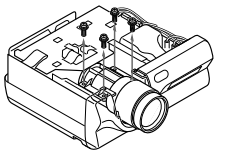
3 Remove the three black screws (M3×8) on the both sides and two black screws (M3×8) on the top locking the hood.



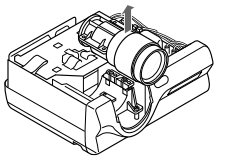
4 Disconnect the 12-pin connector (connected to the PC board C) from the hood. Lift the hood and set it behind the unit.



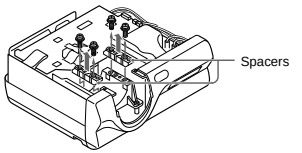
5 Remove the lens hood locking the lens by loosening the four screws (M4×12, with washers) with a Philips screwdriver.



6 Lift and remove the lens.



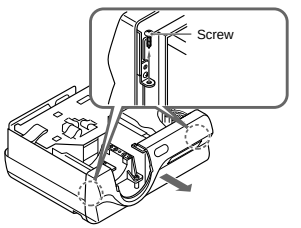
7 Remove the left and right spacers by loosening the four screws (M4×12, with washers).



Note

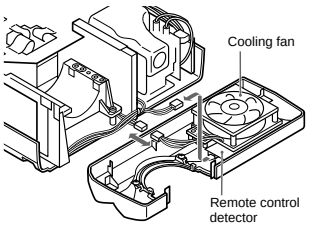
The spacer and the screws may be needed later on. Store them.

8 Loosen the two screws (M3×8, with washers) locking the front panel.

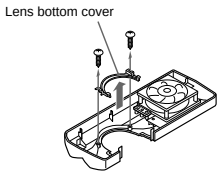


Changing the Lens Position for Rear Projection (Optical Axis Angle: 0 degree)

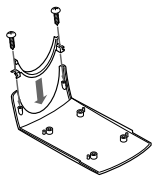
9 Disconnect the two connectors on the back of the front panel, one for cooling fan and the other for remote control detector, and then remove the front panel.



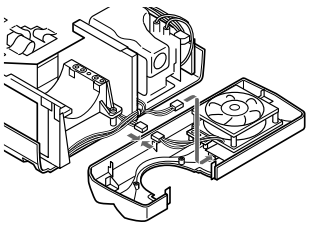
10 Remove the two tapping screws (3×8) from the front panel. Remove the lens bottom cover.



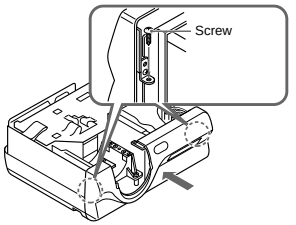
11 Install the lens bottom cover on the lens hood (removed in Step **2**) with the two screws.



12 Connect the connector for remote control detector and the connector for cooling fan.



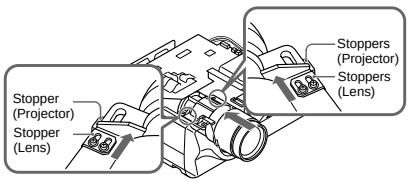
13 Install the front panel and lock with the two screws (M3×8, with washers).



14 Install the lens with the lens stopper and the projector stopper met at their edges.

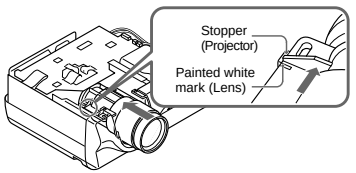
Notes

- When you install the standard lens, make sure that lens stoppers and projector stoppers are met on both sides.
- For ease in identification when you install the lens, make sure that the label on the lens is facing up.

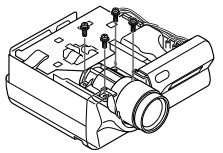


When the lens does not have a stopper

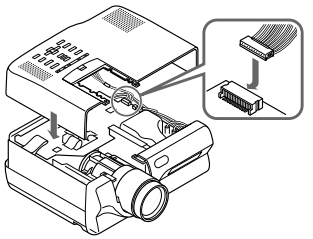
Align the painted white mark (▭) on the lens with the edge of the stopper in the projector.



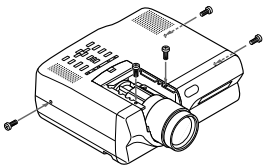
15 Lock the lens by tightening the four screws (M4×12, with washers).



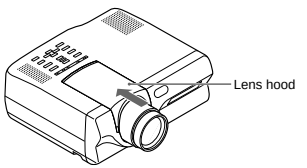
16 Connect the 12-pin connector to the PC board C (disconnected in Step **4**).



17 Install the hood and lock with the five screws (M3×8).



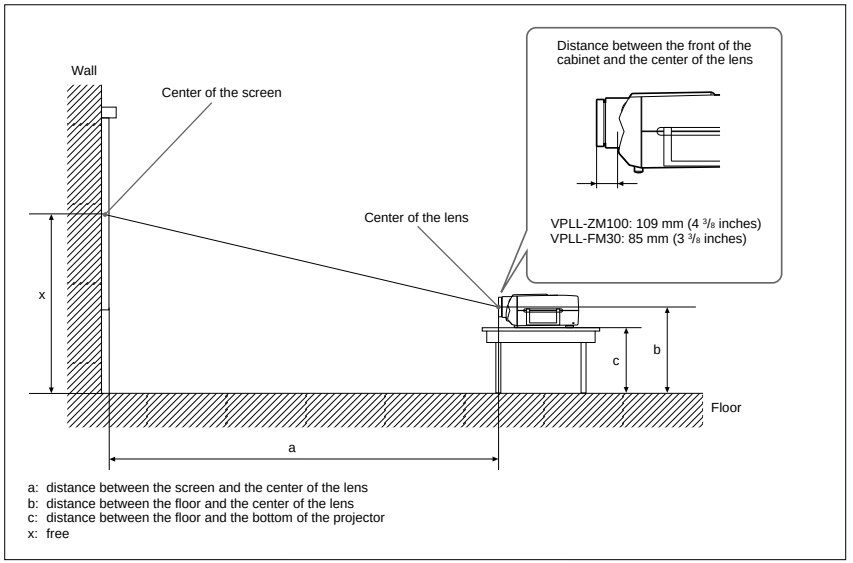
18 Install the lens hood by sliding it from front to back until it snaps into position.



http://getMANUAL.com

Installation Diagram

Floor Installation (Front Projection)



a: distance between the screen and the center of the lens
b: distance between the floor and the center of the lens
c: distance between the floor and the bottom of the projector
x: free

When using the VPLL-ZM100 2 times Zoom long focus lens

For the VPL-X600U/E/M, VPL-X1000U/E/M

Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	4370 (172 1/8)	5500 (216 1/8)	6630 (261 1/8)	8330 (328)	10020 (394 1/2)	11150 (439)	13980 (550 1/2)	16810 (661 7/8)
	Maximum	8340 (328 3/8)	10430 (410 3/4)	12520 (493)	15650 (616 1/4)	18790 (739 7/8)	20880 (822 1/8)	26100 (1027 5/8)	31320 (1233 1/8)
b		x–580 (x–22 7/8)	x–725 (x–28 5/8)	x–870 (x–34 3/8)	x–1088 (x–42 7/8)	x–1305 (x–51 1/2)	x–1450 (x–57 1/8)	x–1813 (x–71 1/2)	x–2176 (x–85 3/4)
c		x–663 (x–26 1/8)	x–808 (x–31 7/8)	x–954 (x–37 5/8)	x–1171 (x–46 1/8)	x–1389 (x–54 3/4)	x–1534 (x–60 1/2)	x–1896 (x–74 3/4)	x–2259 (x–89)

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 72.290/1.31 – 155) × 1.025
a max = (SS × 140.374/1.31 – 20) × 0.975
b = x – SS/1.31 × 9.5
c = x – (SS/1.31 × 9.5 + 83.3)

For the VPL-S600U/E/M

Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	4550 (179 1/4)	5720 (225 1/4)	6900 (271 3/4)	8660 (341)	10430 (410 3/4)	11600 (456 3/4)	14540 (572 1/2)	17480 (688 1/4)
	Minimum	8670 (341 3/8)	10840 (426 7/8)	13020 (512 5/8)	16270 (640 5/8)	19530 (769)	21710 (854 3/4)	27140 (1068 3/8)	32570 (1282 3/8)
b		x–603 (x–23 3/4)	x–754 (x–29 3/4)	x–905 (x–35 3/4)	x–1131 (x–44 5/8)	x–1357 (x–53 1/2)	x–1508 (x–59 3/8)	x–1885 (x–74 1/4)	x–2262 (x–89 1/8)
c		x–686 (x–27 1/8)	x–837 (x–33)	x–988 (x–39)	x–1214 (x–47 7/8)	x–1440 (x–56 3/4)	x–1591 (x–62 3/4)	x–1968 (x–77 1/2)	x–2345 (x–92 3/8)

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 72.290/1.26 – 155) × 1.025
a max = (SS × 140.374/1.26 – 20) × 0.975
b = x – SS/1.26 × 9.5
c = x – (SS/1.26 × 9.5 + 83.3)

XGA/SXGA signal input
a min = (SS × 72.290/1.29 – 155) × 1.025
a max = (SS × 140.374/1.29 – 20) × 0.975
b = x – SS/1.29 × 9.5
c = x – (SS/1.29 × 9.5 + 83.3)

Macintosh 16-inch mode signal (horizontal 832 × vertical 624)/HDTV input
Refer to the table of the VPL-X600U/E/M.

For the VPL-S900U/E/M

Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	4400 (173 1/4)	5540 (218 1/4)	6680 (263 1/8)	8400 (330 3/4)	10110 (398 1/8)	11250 (443)	14100 (555 1/4)	16950 (667 1/2)
	Minimum	8410 (331 1/4)	10510 (413 7/8)	12620 (497)	15780 (621 3/8)	18940 (745 7/8)	21050 (828 7/8)	26320 (1036 3/8)	31580 (1243 1/2)
b		x–585 (x–23 1/8)	x–731 (x–28 7/8)	x–877 (x–34 5/8)	x–1097 (x–43 1/4)	x–1316 (x–51 7/8)	x–1462 (x–57 5/8)	x–1828 (x–72)	x–2194 (x–86 3/8)
c		x–668 (x–26 3/8)	x–815 (x–32 1/8)	x–961 (x–37 7/8)	x–1180 (x–46 1/2)	x–1399 (x–55 1/8)	x–1546 (x–60 7/8)	x–1911 (x–75 3/8)	x–2277 (x–89 3/4)

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 72.290/1.2992 – 155) × 1.025
a max = (SS × 140.374/1.2992 – 20) × 0.975
b = x – SS/1.2992 × 9.5
c = x – (SS/1.2992 × 9.5 + 83.3)

Installation Diagram

When using the VPLL-FM30 Fixed short focus lens

For the VPL-X600U/E/M, VPL-X1000U/E/M

Unit: mm (inches)

Screen size (inches)	40	60	80	100	120	150	180	200	250	290
a	1080 (42 5/8)	1650 (65)	2220 (87 1/2)	2790 (109 7/8)	3360 (132 3/8)	4210 (165 3/4)	5070 (199 5/8)	5640 (222 1/8)	7060 (278)	8200 (322 7/8)
b	x–290 (x–11 1/2)	x–435 (x–17 1/4)	x–580 (x–22 7/8)	x–725 (x–28 5/8)	x–870 (x–34 3/8)	x–1088 (x–42 7/8)	x–1305 (x–51 1/2)	x–1450 (x–57 1/8)	x–1813 (x–71 1/2)	x–2103 (x–82 7/8)
c	x–373 (x–14 3/4)	x–518 (x–20 1/2)	x–663 (x–26 1/8)	x–808 (x–31 7/8)	x–954 (x–37 5/8)	x–1171 (x–46 1/8)	x–1389 (x–54 3/4)	x–1534 (x–60 1/2)	x–1896 (x–74 3/4)	x–2186 (x–86 1/8)

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 37.313 × SS/1.31 – 60
b = x – SS/1.31 × 9.5
c = x – (SS/1.31 × 9.5 + 83.3)

For the VPL-S600U/E/M

Unit: mm (inches)

Screen size (inches)	40	60	80	100	120	150	180	200	250	270
a	1120 (44 1/8)	1720 (67 3/4)	2310 (91)	2900 (114 1/4)	3490 (137 1/2)	4380 (172 1/2)	5270 (207 1/2)	5860 (230 3/4)	7340 (289)	7940 (312 5/8)
b	x–302 (x–12)	x–452 (x–17 7/8)	x–603 (x–23 3/4)	x–754 (x–29 3/4)	x–905 (x–35 3/4)	x–1131 (x–44 5/8)	x–1357 (x–53 1/2)	x–1508 (x–59 3/8)	x–1885 (x–74 1/4)	x–2036 (x–80 1/4)
c	x–385 (x–15 1/4)	x–536 (x–21 1/8)	x–686 (x–27 1/8)	x–837 (x–33)	x–988 (x–39)	x–1214 (x–47 7/8)	x–1440 (x–56 3/4)	x–1591 (x–62 3/4)	x–1968 (x–77 1/2)	x–2119 (x–83 1/2)

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 37.313 × SS/1.26 – 60
b = x – SS/1.26 × 9.5
c = x – (SS/1.26 × 9.5 + 83.3)

XGA/SXGA signal input
a = 37.313 × SS/1.29 – 60
b = x – SS/1.29 × 9.5
c = x – (SS/1.29 × 9.5 + 83.3)

Macintosh 16-inch mode signal (horizontal 832 × vertical 624)/HDTV input
Refer to the table of the VPL-X600U/E/M.

For the VPL-S900U/E/M

Unit: mm (inches)

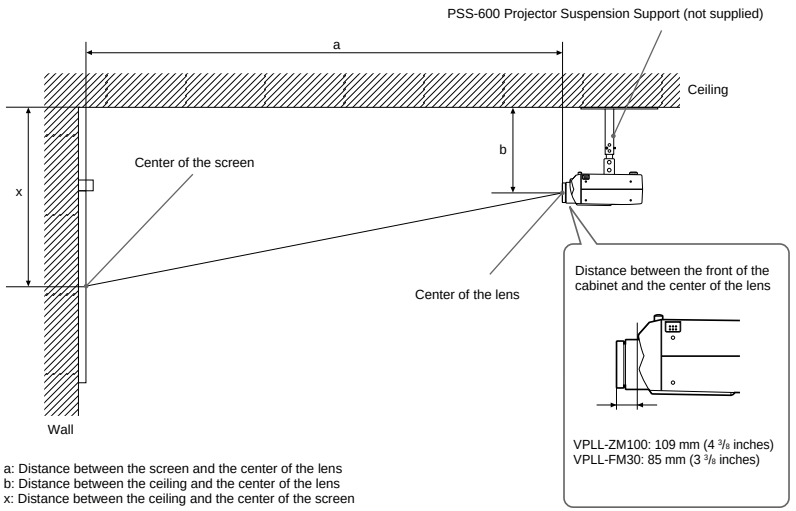
Screen size (inches)	40	60	80	100	120	150	180	200	250	280
a	1090 (43)	1660 (65 3/8)	2240 (88 1/4)	2810 (110 3/4)	3390 (133 1/2)	4250 (167 3/8)	5110 (201 1/4)	5680 (223 3/4)	7120 (280 3/8)	7980 (314 1/4)
b	x–292 (x–11 5/8)	x–439 (x–17 3/8)	x–585 (x–23 1/8)	x–731 (x–28 7/8)	x–877 (x–34 5/8)	x–1097 (x–43 1/4)	x–1316 (x–51 7/8)	x–1462 (x–57 5/8)	x–1828 (x–72)	x–2047 (x–80 5/8)
c	x–376 (x–14 7/8)	x–522 (x–20 5/8)	x–668 (x–26 3/8)	x–815 (x–32 1/8)	x–961 (x–37 7/8)	x–1180 (x–46 1/2)	x–1399 (x–55 1/8)	x–1546 (x–60 7/8)	x–1911 (x–75 3/8)	x–2131 (x–84)

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 37.313 × SS/1.2992 – 60
b = x – SS/1.2992 × 9.5
c = x – (SS/1.2992 × 9.5 + 83.3)

Ceiling Installation (Front Projection)

When installing the projector on the ceiling, use the PSS-600 Projector Suspension Support.


PSS-600 Projector Suspension Support (not supplied)
a
Ceiling
b
x
Center of the screen
Center of the lens
Wall
Distance between the front of the cabinet and the center of the lens
VPLL-ZM100: 109 mm (4 3/8 inches)
VPLL-FM30: 85 mm (3 3/8 inches)

a: Distance between the screen and the center of the lens
b: Distance between the ceiling and the center of the lens
x: Distance between the ceiling and the center of the screen

When using the VPLL-ZM100 2 times Zoom long focus lens

For the VPL-X600U/E/M, VPL-X1000U/E/M

Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	4370 (172 1/8)	5500 (216 1/8)	6630 (261 1/8)	8330 (328)	10020 (394 1/2)	11150 (439)	13980 (550 1/2)	16810 (661 7/8)
	Maximum	8340 (328 3/8)	10430 (410 3/4)	12520 (493)	15650 (616 1/4)	18790 (739 7/8)	20880 (822 1/8)	26100 (1027 5/8)	31320 (1233 1/8)
x		b+580 (b+22 7/8)	b+725 (b+28 5/8)	b+870 (b+34 3/8)	b+1088 (b+42 7/8)	b+1305 (b+51 1/2)	b+1450 (b+57 1/8)	b+1813 (b+71 1/2)	b+2176 (b+85 3/4)
b		When using PSS-600, the height can be adjusted 226, 251, 276, 326, 351, 376 (9, 10, 10 7/8, 12 7/8, 13 7/8, 14 7/8)							

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 72.290/1.31 – 155) × 1.025
a max = (SS × 140.374/1.31 – 20) × 0.975
x = b + SS × 9.5/1.31

(Continued)

Installation Diagram

For the VPL-S600U/E/M

Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	4550 (179 1/4)	5720 (225 1/4)	6900 (271 3/4)	8660 (341)	10430 (410 3/4)	11600 (456 3/4)	14540 (572 1/2)	17480 (688 1/4)
	Maximum	8670 (341 3/8)	10840 (426 7/8)	13020 (512 3/8)	16270 (640 5/8)	19530 (769)	21710 (854 3/4)	27140 (1068 5/8)	32570 (1282 3/8)
x		b+603 (b+23 3/4)	b+754 (b+29 3/4)	b+905 (b+35 3/4)	b+1131 (b+44 5/8)	b+1357 (b+53 1/2)	b+1508 (b+59 3/8)	b+1885 (b+74 1/4)	b+2262 (b+89 1/8)
b		When using PSS-600, the height can be adjusted 226, 251, 276, 326, 351, 376 (9, 10, 10 7/8, 12 7/8, 13 7/8, 14 7/8)							

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 72.290/1.26 – 155) × 1.025
a max = (SS × 140.374/1.26 – 20) × 0.975
x = b + SS × 9.5/1.26

XGA/SXGA signal input
a min = (SS × 72.290/1.29 – 155) × 1.025
a max = (SS × 140.374/1.29 – 20) × 0.975
x = b + SS × 9.5/1.29

Macintosh 16-inch mode signal (horizontal 832 × vertical 624)/HDTV input
Refer to the table of the VPL-X600U/E/M.

For the VPL-S900U/E/M

Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	4400 (173 1/4)	5540 (218 1/4)	6680 (263 1/8)	8400 (330 3/4)	10110 (398 1/8)	11250 (443)	14100 (555 1/4)	16950 (667 1/2)
	Maximum	8410 (331 1/4)	10510 (413 7/8)	12620 (497)	15780 (621 3/8)	18940 (745 7/8)	21050 (828 7/8)	26320 (1036 3/8)	31580 (1243 1/2)
x		b+585 (b+23 1/8)	b+731 (b+28 7/8)	b+877 (b+34 5/8)	b+1097 (b+43 1/4)	b+1316 (b+51 7/8)	b+1462 (b+57 5/8)	b+1828 (b+72)	b+2194 (b+86 3/8)
b		When using PSS-600, the height can be adjusted 226, 251, 276, 326, 351, 376 (9, 10, 10 7/8, 12 7/8, 13 7/8, 14 7/8)							

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 72.290/1.2992 – 155) × 1.025
a max = (SS × 140.374/1.2992 – 20) × 0.975
x = b + SS /1.2992× 9.5

When using the VPLL-FM30 Fixed short focus lens

For the VPL-X600U/E/M, VPL-X1000U/E/M

Unit: mm (inches)

Screen size (inches)	80	100	120	150	180	200	250	290
a	2220 (87 1/2)	2790 (109 7/8)	3360 (132 3/8)	4210 (165 3/4)	5070 (199 5/8)	5640 (222 1/8)	7060 (278)	8200 (322 7/8)
x	b+580 (b+22 7/8)	b+725 (b+28 5/8)	b+870 (b+34 3/8)	b+1088 (b+42 7/8)	b+1305 (b+51 1/2)	b+1450 (b+57 1/8)	b+1813 (b+71 1/2)	b+2103 (b+82 7/8)
b	When using PSS-600, the height can be adjusted 226, 251, 276, 326, 351, 376 (9, 10, 10 7/8, 12 7/8, 13 7/8, 14 7/8)							

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 37.313 × SS/1.31 – 60
x = b + SS/1.31 × 9.5

For the VPL-S600U/E/M

Unit: mm (inches)

Screen size (inches)	80	100	120	150	180	200	250	270
a	2310 (91)	2900 (114 1/4)	3490 (137 1/2)	4380 (172 1/2)	5270 (207 1/2)	5860 (230 3/4)	7340 (289)	7940 (312 5/8)
x	b+603 (b+23 3/4)	b+754 (b+29 3/4)	b+905 (b+35 3/4)	b+1131 (b+44 5/8)	b+1357 (b+53 1/2)	b+1508 (b+59 3/8)	b+1885 (b+74 1/4)	b+2036 (b+80 1/4)
b	When using PSS-600, the height can be adjusted 226, 251, 276, 326, 351, 376 (9, 10, 10 7/8, 12 7/8, 13 7/8, 14 7/8)							

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 37.313 × SS/1.26 – 60
x = b + SS/1.26 × 9.5

XGA/SXGA signal input
a = 37.313 × SS/1.29 – 60
x = b + SS/1.29 × 9.5

Macintosh 16-inch mode signal (horizontal 832 × vertical 624)/HDTV input
Refer to the table of the VPL-X600U/E/M.

For the VPL-S900U/E/M

Unit: mm (inches)

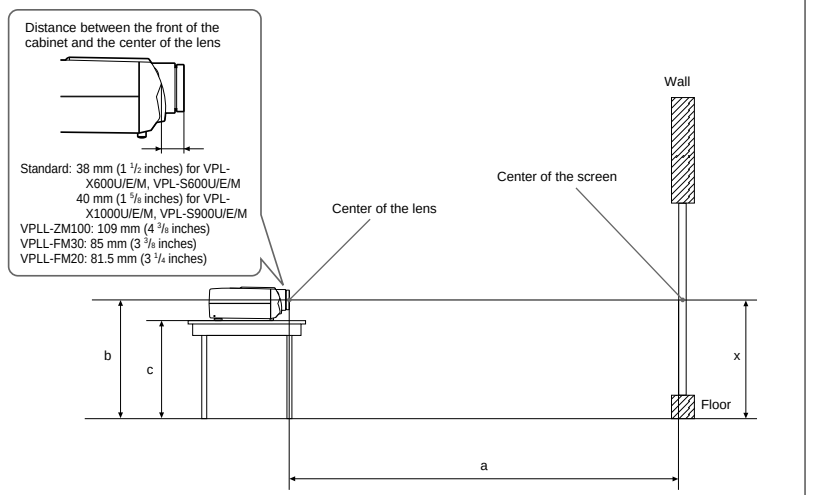
Screen size (inches)	80	100	120	150	180	200	250	280
a	2240 (88 1/4)	2810 (110 3/4)	3390 (133 1/2)	4250 (167 3/8)	5110 (201 1/4)	5680 (223 3/4)	7120 (280 3/8)	7980 (314 1/4)
x	b+585 (b+23 1/8)	b+731 (b+28 7/8)	b+877 (b+34 5/8)	b+1097 (b+43 1/4)	b+1316 (b+51 7/8)	b+1462 (b+57 5/8)	b+1828 (b+72)	b+2047 (b+80 5/8)
b	When using PSS-600, the height can be adjusted 226, 251, 276, 326, 351, 376 (9, 10, 10 7/8, 12 7/8, 13 7/8, 14 7/8)							

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 37.313 × SS/1.2992 – 60
x = b + SS/1.2992 × 9.5

Installation Diagram

Floor Installation (Rear Projection: Optical Axis Angle 0 Degree)


Distance between the front of the cabinet and the center of the lens
Standard: 38 mm (1 1/2 inches) for VPL-X600U/E/M, VPL-S600U/E/M
40 mm (1 5/8 inches) for VPL-X1000U/E/M, VPL-S900U/E/M
VPLL-ZM100: 109 mm (4 3/8 inches)
VPLL-FM30: 85 mm (3 3/8 inches)
VPLL-FM20: 81.5 mm (3 1/4 inches)
Wall
Center of the screen
Center of the lens
b
c
x
Floor
a

a: distance between the screen and the center of the lens
b: distance between the floor and the center of the lens
c: distance between the floor and the bottom of the projector
x: free

Note

If the projector has been set at the factory and if you project a picture from the rear, the picture will be upside down. If you use a mirror, the picture may be reversed. In these cases, change the INSTALLATION in the SET SETTING menu.
For details, refer to the INSTALLATION in the Operating Instructions for your LCD data projector.

When using the Standard lens

For the VPL-X600U/E/M

Unit: mm (inches)

Screen size (inches)		40	60	80	100	120	150	180	200	250	300
a	Minimum	1490 (58 3/4)	2270 (89 3/8)	3060 (120 1/2)	3850 (151 5/8)	4630 (182 3/8)	5810 (228 3/4)	6990 (275 1/4)	7780 (306 3/8)	9740 (383 1/2)	11710 (461 1/8)
	Maximum	1890 (74 1/2)	2870 (113)	3860 (152)	4840 (190 5/8)	5830 (229 5/8)	7310 (287 7/8)	8780 (345 3/4)	9770 (384 3/4)	12230 (481 1/2)	14700 (578 3/4)
b		x (x)									
c		x–74 (x–3)									

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 50.249/1.31 – 84) × 1.025
a max = (SS × 66.195/1.31 – 87) × 0.975
b = x
c = x – 74

For the VPL-S600U/E/M

Unit: mm (inches)

Screen size (inches)		40	60	80	100	120	150	180	200	250	300
a	Minimum	1550 (64 1/8)	2370 (93 3/8)	3180 (125 1/4)	4000 (157 1/2)	4820 (189 7/8)	6050 (238 1/4)	7270 (286 1/4)	8090 (318 5/8)	10130 (398 7/2)	12180 (479 5/8)
	Maximum	1960 (77 1/4)	2990 (117 3/4)	4010 (157 7/8)	5040 (198 1/2)	6060 (238 5/8)	7600 (299 1/4)	9140 (359 7/8)	10160 (400)	12720 (500 7/8)	15280 (601 5/8)
b		x (x)									
c		x–74 (x–3)									

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 50.249/1.26 – 84) × 1.025
a max = (SS × 66.195/1.26 – 87) × 0.975
b = x
c = x – 74

XGA/SXGA signal input
a min = (SS × 50.249/1.29 – 84) × 1.025
a max = (SS × 66.195/1.29 – 87) × 0.975
b = x
c = x – 74

Macintosh 16-inch mode signal (horizontal 832 × vertical 624)/HDTV input
Refer to the table of the VPL-X600U/E/M.

Installation Diagram

For the VPL-X1000U/E/M

Unit: mm (inches)

Screen size (inches)		40	60	80	100	120	150	180	200	250	300
a	Minimum	1560 (61 1/2)	2380 (93 3/4)	3210 (126 1/2)	4040 (159 1/8)	4860 (191 3/8)	6100 (240 1/4)	7340 (289 1/8)	8170 (321 3/4)	10240 (403 1/4)	12300 (484 3/8)
	Maximum	1980 (78)	3020 (118 15/16)	4050 (159 1/2)	5090 (200 1/2)	6120 (241)	7680 (302 3/8)	9230 (363 1/2)	10270 (404 3/8)	12860 (506 3/8)	15450 (608 3/8)
b		x (x)									
c		x–74 (x–3)									

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 52.83/1.3102 – 95.03) × 1.025
a max = (SS × 69.64/1.3102 – 96.17) × 0.975
b = x
c = x – 74

For the VPL-S900U/E/M

Unit: mm (inches)

Screen size (inches)		40	60	80	100	120	150	180	200	250	300
a	Minimum	1570 (61 7/8)	2400 (94 1/2)	3240 (127 5/8)	4070 (160 3/8)	4900 (193)	6150 (242 1/4)	7410 (291 7/8)	8240 (324 1/2)	10320 (406 3/8)	12410 (488 3/4)
	Maximum	2000 (78 3/4)	3040 (119 3/4)	4090 (161 1/8)	5130 (202)	6180 (243 3/8)	7750 (305 1/4)	9310 (366 5/8)	10360 (408)	12970 (510 3/4)	15580 (613 1/2)
b		x (x)									
c		x–74 (x–3)									

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 52.83/1.2992 – 95.03) × 1.025
a max = (SS × 69.64/1.2992 – 96.17) × 0.975
b = x
c = x – 74

When using the VPLL-ZM100 2 times Zoom long focus lens

For the VPL-X600U/E/M, VPL-X1000U/E/M

Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	4370 (172 1/8)	5500 (216 1/8)	6630 (261 1/8)	8330 (328)	10020 (394 1/2)	11150 (439)	13980 (550 1/2)	16810 (661 7/8)
	Maximum	8340 (328 3/8)	10430 (410 3/4)	12520 (493)	15650 (616 1/4)	18790 (739 7/8)	20880 (822 1/8)	26100 (1027 5/8)	31320 (1233 1/8)
b		x (x)							
c		x–74 (x–3)							

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 72.290/1.31 – 155) × 1.025
a max = (SS × 140.374/1.31 – 20) × 0.975
b = x
c = x – 74

For the VPL-S600U/E/M

Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	4550 (179 1/4)	5720 (225 1/4)	6900 (271 3/4)	8660 (341)	10430 (410 3/4)	11600 (456 3/4)	14540 (572 1/2)	17840 (688 1/4)
	Maximum	8670 (341 3/8)	10840 (426 7/8)	13020 (512 5/8)	16270 (640 5/8)	19530 (769)	21710 (854 3/4)	27140 (1068 5/8)	32570 (1282 3/8)
b		x (x)							
c		x–74 (x–3)							

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 72.290/1.26 – 155) × 1.025
a max = (SS × 140.374/1.26 – 20) × 0.975
b = x
c = x – 74

XGA/SXGA signal input
a min = (SS × 72.290/1.29 – 155) × 1.025
a max = (SS × 140.374/1.29 – 20) × 0.975
b = x
c = x – 74

Macintosh 16-inch mode signal (horizontal 832 × vertical 624)/HDTV input
Refer to the table of the VPL-X600U/E/M.

Installation Diagram

For the VPL-S900U/E/M

Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	4400 (173 1/4)	5540 (218 1/4)	6680 (263 1/8)	8400 (330 3/4)	10110 (398 1/8)	11250 (443)	14100 (555 1/4)	16950 (667 1/2)
	Maximum	8410 (331 1/4)	10510 (413 7/8)	12620 (497)	15780 (621 3/8)	18940 (745 7/8)	21050 (828 7/8)	26320 (1036 3/8)	31580 (1243 1/2)
b		x (x)							
c		x–74 (x–3)							

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a min = (SS × 72.290/1.2992 – 155) × 1.025
a max = (SS × 140.374/1.2992 – 20) × 0.975
b = x
c = x – 74

When using the VPLL-FM30 Fixed short focus lens

For the VPL-X600U/E/M, VPL-X1000U/E/M

Unit: mm (inches)

Screen size (inches)	40	60	80	100	120	150	180	200	250	290
a	1080 (42 5/8)	1650 (65)	2220 (87 1/2)	2790 (109 7/8)	3360 (132 3/8)	4210 (165 3/4)	5070 (199 5/8)	5640 (222 1/8)	7060 (278)	8200 (322 7/8)
b					x (x)					
c					x–74 (x–3)					

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 37.313 × SS/1.31 – 60
b = x
c = x – 74

For the VPL-S600U/E/M

Unit: mm (inches)

Screen size (inches)	40	60	80	100	120	150	180	200	250	270
a	1120 (44 1/8)	1720 (67 3/4)	2310 (91)	2900 (114 1/4)	3490 (137 1/2)	4380 (172 1/2)	5270 (207 1/2)	5860 (230 3/4)	7340 (289)	7940 (312 5/8)
b					x (x)					
c					x–74 (x–3)					

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 37.313 × SS/1.26 – 60
b = x
c = x – 74

XGA/SXGA signal input
a = 37.313 × SS/1.29 – 60
b = x
c = x – 74

Macintosh 16-inch mode signal (horizontal 832 × vertical 624)/HDTV input
Refer to the table of the VPL-X600U/E/M.

For the VPL-S900U/E/M

Unit: mm (inches)

Screen size (inches)	40	60	80	100	120	150	180	200	250	280
a	1090 (43)	1660 (65 3/8)	2240 (88 1/4)	2810 (110 3/4)	3390 (133 1/2)	4250 (167 3/8)	5110 (201 1/4)	5680 (223 3/4)	7120 (280 3/8)	7980 (314 1/4)
b					x (x)					
c					x–74 (x–3)					

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 37.313 × SS/1.2992 – 60
b = x
c = x – 74

Installation Diagram

When using the VPLL-FM20 Fixed short focus lens

For the VPL-X600U/E/M, VPL-X1000U/E/M

Unit: mm (inches)

Screen size (inches)	50	60	80	100	120	150	180	200
a	860 (33 7/8)	1050 (41 3/8)	1420 (56)	1790 (70 1/2)	2160 (85 1/8)	2720 (107 1/8)	3270 (128 3/4)	3640 (143 3/8)
b					x (x)			
c					x–74 (x–3 3/8)			

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 24.275 × SS/1.31 – 64
b = x
c = x – 74

For the VPL-S600U/E/M

Unit: mm (inches)

Screen size (inches)	50	60	80	100	120	150	180	190
a	900 (35 1/2)	1090 (43)	1480 (58 3/8)	1860 (73 1/4)	2250 (88 5/8)	2830 (111 1/2)	3400 (133 7/8)	3600 (141 3/4)
b					x (x)			
c					x–74 (x–3)			

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 24.275 × SS/1.26 – 64
b = x
c = x – 74

XGA/SXGA signal input
a = 24.275 × SS/1.29 – 64
b = x
c = x – 74

Macintosh 16-inch mode signal (horizontal 832 × vertical 624)/HDTV input
Refer to the table of the VPL-X600U/E/M.

For the VPL-S900U/E/M

Unit: mm (inches)

Screen size (inches)	50	60	80	100	120	150	180	190
a	870 (34 3/8)	1060 (41 3/4)	1430 (56 3/8)	1800 (70 7/8)	2180 (85 7/8)	2740 (108)	3300 (130)	3490 (137 1/2)
b					x (x)			
c					x–74 (x–3)			

Method of calculation (unit: mm)

SS: Screen size diagonal (inches)
a = 24.275 × SS/1.2992 – 64
b = x
c = x – 74

SONY

3-862-502-**11** (1)

Interface Board

Operating Instructions	**Page 2**
Mode d’emploi	**Page 6**
Bedienungsanleitung	**Seite 10**
Manual de instrucciones	**Página 14**
Istruzioni per l’uso	**Pagina 18**

IFB-X600E

© 1998 by Sony Corporation

English

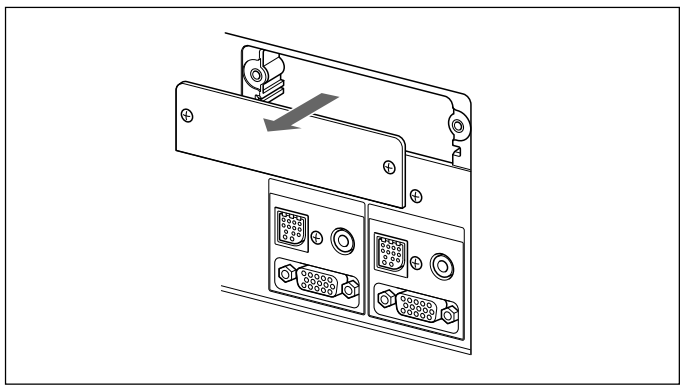
The IFB-X600E interface board is designed to be mounted on Sony VPL-X600E/S600E LCD data projector so that composite video or S video (Y/C) signals and audio signals from video equipment can be input.

Mounting the IFB-X600E

Note

Before installing the board, make sure the following have been done:
- Turn off the power of the projector.
- Disconnect the projector power cable from the wall outlet.

1 Remove the blind plate on the rear of the projector by loosening the two screws with the supplied Philips screwdriver.

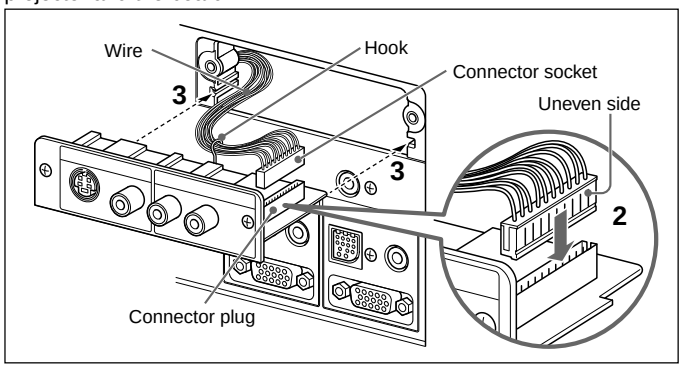


2 Pull out the connector socket from the projector. Insert the connector socket (set the uneven side on the right) into the interface board connector plug. Gather the wires together and place them in the hook of the interface board.

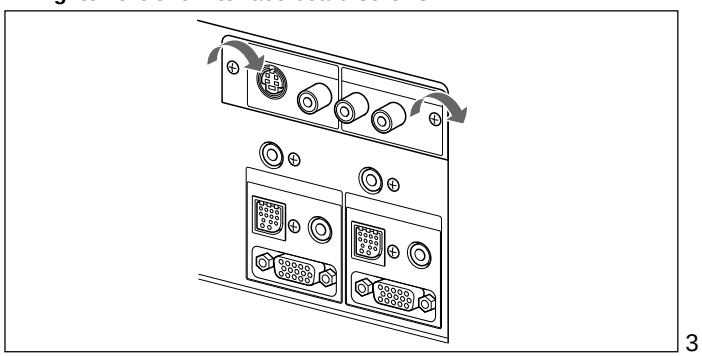
3 Insert the interface board by aligning it with the projector guides.

Caution

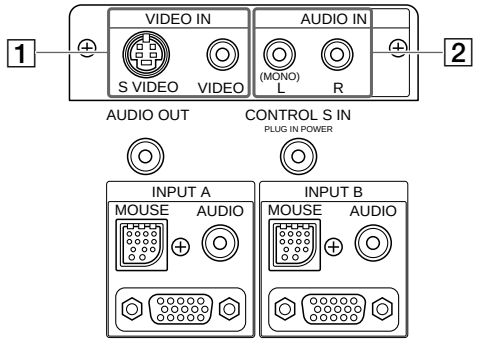
Make sure that the wire is not caught between the opening of the projector and the board.



4 Tighten the two interface board screws.



Location and Function of Parts



1 **VIDEO IN jacks**

S VIDEO (mini DIN 4-pin): Connects to the S video output (Y/C video output) of a video equipment.

VIDEO (phono type): Connects to the composite video output of video equipment.

Note

If you connect video equipment to both the S VIDEO and VIDEO jacks, the signal from the S VIDEO jack is selected. When projecting the picture via the VIDEO jack, be sure not to connect a cable to the S VIDEO jack.

2 **AUDIO IN L (MONO)/R jacks (phono type):**

Connect to the audio output of equipment. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

Specifications

VIDEO IN jacks

S VIDEO (4-pin mini-DIN type):

Y (luminance) signal input: 1 Vp-p ± 2 dB, sync negative, 75 ohms terminated

C (chrominance) signal input: burst 0.286 Vp-p ± 2 dB (NTSC), burst 0.3 Vp-p ± 2 dB (PAL), 75 ohms terminated

VIDEO (phono type):

Composite video signal input, 1 Vp-p ± 2 dB, sync negative, 75 ohms terminated

AUDIO IN jacks

L (MONO) / R (phono type):

500 mVrms, impedance more than 47 kilohms

Supplied accessories

Audio/Video cable (1)
Philips screwdriver (1)

Design and specifications are subject to change without notice.

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SONY

3-862-500-**01**(1)

Projector Suspension Support

Installation manual
Manuel d’installation
Installationshandbuch
Manual de instalación
Manuale d’installazione

PSS-600

© 1998 by Sony Corporation

English

Maximum load: 10 kg (22 lb 1 oz)

The PSS-600 suspension support is designed to be used with the Sony VPL-X600U/E/M or VPL-S600U/E/M LCD data projector.

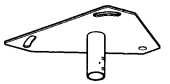
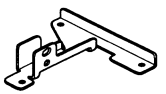
Caution
- For installation, consult with qualified Sony personnel.
- The ceiling should be capable of supporting a weight of at least 60 kg (132 lb 4 oz); if not, the ceiling must be reinforced.
- When you attach the bracket directly to the ceiling, use commercially available M10 bolts with nuts and washers, depending on the ceiling. Use of other bolts, nuts, and washers other than M10 may present a danger of falling.
- Be sure to assemble and attach the bracket in the order indicated; otherwise the projector may fall.

Table of contents

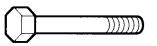
English

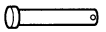
Parts List 5
Installation Diagram 8
Attaching to the ceiling 12
Installation Examples 18
Specifications 22

Parts List

(a)	**Upper ceiling mount bracket (1)** 
(b)	**Adjustment pipe (1)**
(c)	**Adjustment pipe (1)**
(d)	**Projector mount bracket (1)** 
(e)	**Bolt M5 x 14 (3)** Parts number 4-063-982-01

Parts List

(f)	**Bolt M8 x 50 (2)** Parts number 4-047-746-11 
(g)	**Screw M4 x 6 (6)** Parts number 4-047-765-11
(h)	**Washer M5 (3)** Parts number 4-063-983-01
(i)	**Washer M8 (4)** Parts number 4-047-748-11
(j)	**Spring washer M5 (3)** Parts numbe 4-063-984-01

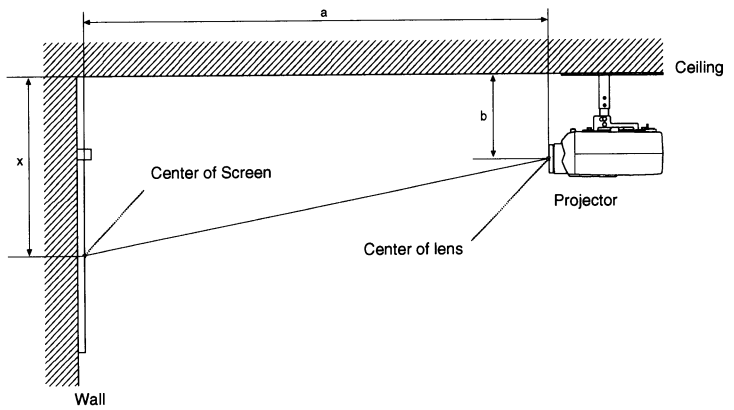
(k)	**Toothed lock washer M8 (4)**	Parts number 4-047-743-11
(l)	**Nut M8 (2)**	Parts number 4-047-742-11
(m)	**6 mm pin (2)**	Parts number 4-047-744-11 
(n)	**Snap pin (2)**	Parts number 4-047-903-11

Installation Diagram

For details of screen size and installation measurement for projection, refer to the following manuals:

- Operating Instructions
- Installation Manual for Dealers
- Installation Manual of the projection lens (when using the optional lens)

Side view



a: Distance between the screen and the center of lens

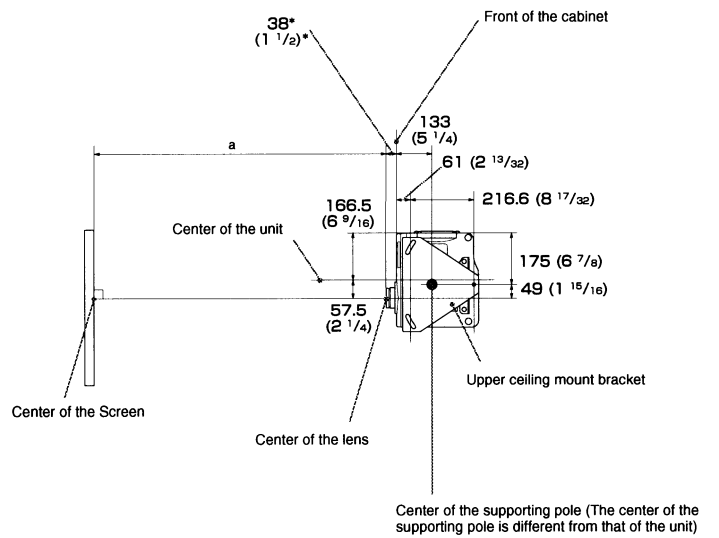
b: Distance between the ceiling and the center of lens. For details, see page 11.

x: Distance between the ceiling and the center of screen

Installation Diagram

Top view

Align the center of the lens with the center of the screen.

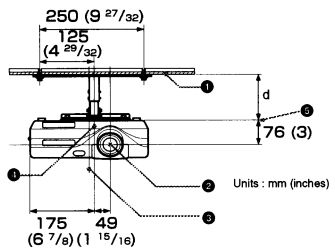


Units : mm (inches)

* When using the standard lens equipped with VPL-X600U/E/M / S600U/E/M

Front view

The lens is offset 49 mm (1 15/16 inches) to the right from the center of the supporting pole. When mounting, take care to align the center of the lens with the center of the screen; not the center of the supporting pole.



d: Distance between the ceiling and the surface of the mounting bracket
Using adjustment pipe (b) : 150/175/200 mm (6/7/7 7/8 inches)
Using adjustment pipe (c) : 250/275/300 mm (9 7/8 /10 7/8 /11 7/8 inches)

❶ Ceiling

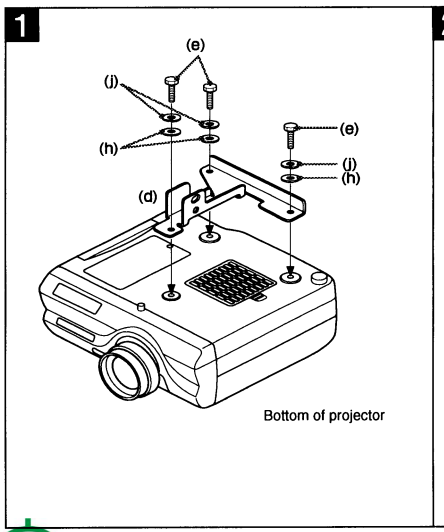
❷ Center of the lens

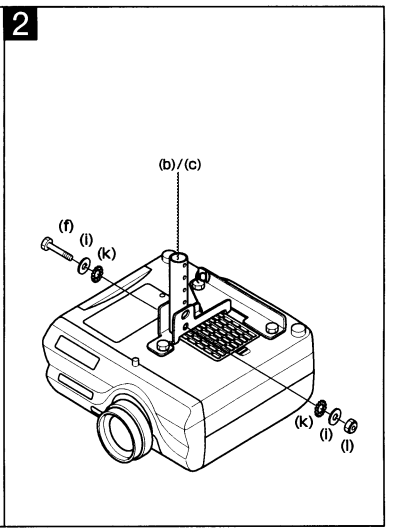
❸ Center of the unit

❹ Center of the supporting pole

❺ The bottom surface of the mounting bracket

Attaching to the ceiling





English

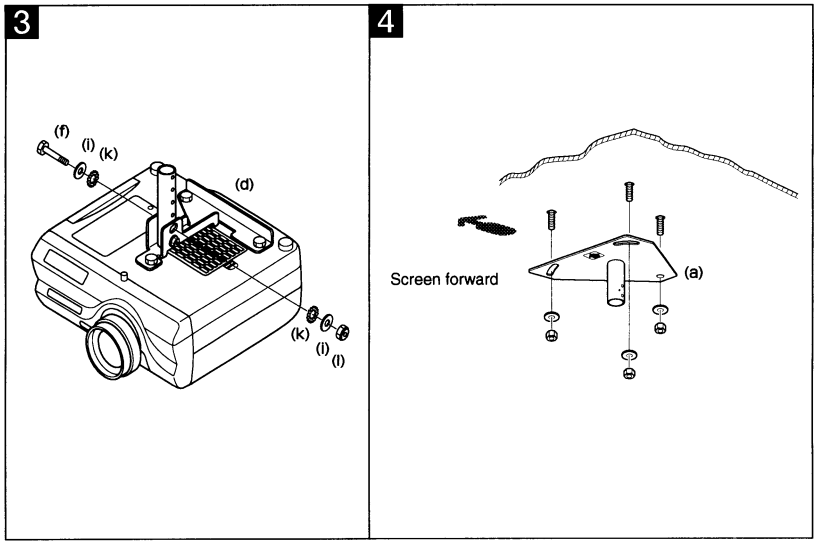
1 Turn the projector upside down and attach the projector mount bracket (d) using three bolts M5 x 14 (e), three washers M5 (h) and three spring washers M5 (j).

Notes

- When attaching the bracket, be careful not to overtighten the bolts.
- Before attaching the projector mount bracket, place a protective sheet (cloth) beneath the projector.

2 Attach adjustment pipe (b) or (c) to projector mount bracket (d) using a bolt M8 x 50 (f), two washers M8 (i), two thoothed lock washers M8 (k) and a nut M8 (l).
Adjustable height using the pipe (b) is 150/175/200 mm (6/7/7 7/8 inches).
Adjustable height using the pipe (c) is 250/275/300 mm (9 7/8 /10 7/8 /11 7/8 inches).

Attaching to the ceiling

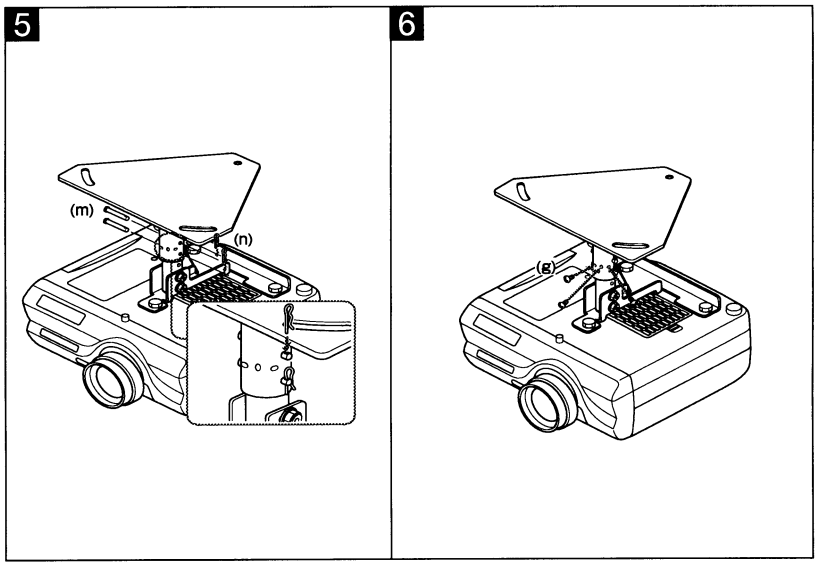


English

3 Attach the adjustment pipe to the projector mount bracket (d) using a bolt M8 x 50 (f), two toothed lock washers M8 (k), two washers M8 (i) and a nut M8 (l).
Attach the pipes so that the projector becomes level. You may tilt the projector slightly, but this will make the projected picture trapezoidal.

4 Attach the upper ceiling mount bracket (a) to the ceiling.
Use M 10 bolts, nuts and washers (not supplied).

Attaching to the ceiling



English

5 Insert the adjustment pipe into the upper ceiling mount bracket (a). Attach the pipe with the two 6 mm pins (m) and the two snap pins (n).
Pipe (b) can be adjusted to a height of 150/175/200 mm (6/7/7 7/8 inches); pipe (c) can be adjusted to a length of between 250/275/300 mm (9 7/8 /10 7/8 /11 7/8 inches).

6 Secure the ceiling mount bracket (a) and the adjustment pipe you attached in step 5.
Use six M4 × 6 bolts (g).
Then, tighten the bolts you attached in step 3 to secure the adjustment pipe.

Installation Examples

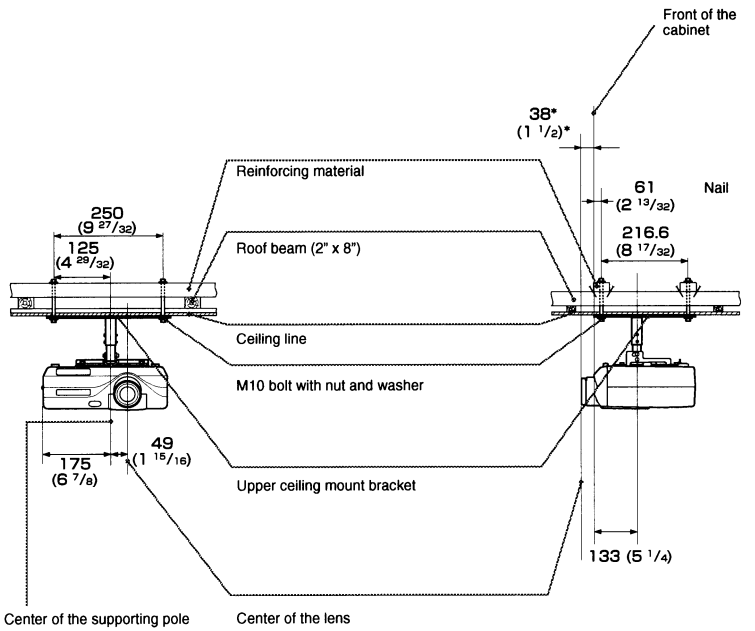
The following illustrations show the projector suspension support attached to with the ceiling. Installation is different depending on the material of ceiling.

Caution

Before installation, check that the maximum ceiling loading is in excess of 60 kg (132 lb 4 oz) .

For wooden ceiling

For-one-story house or uppermost floor

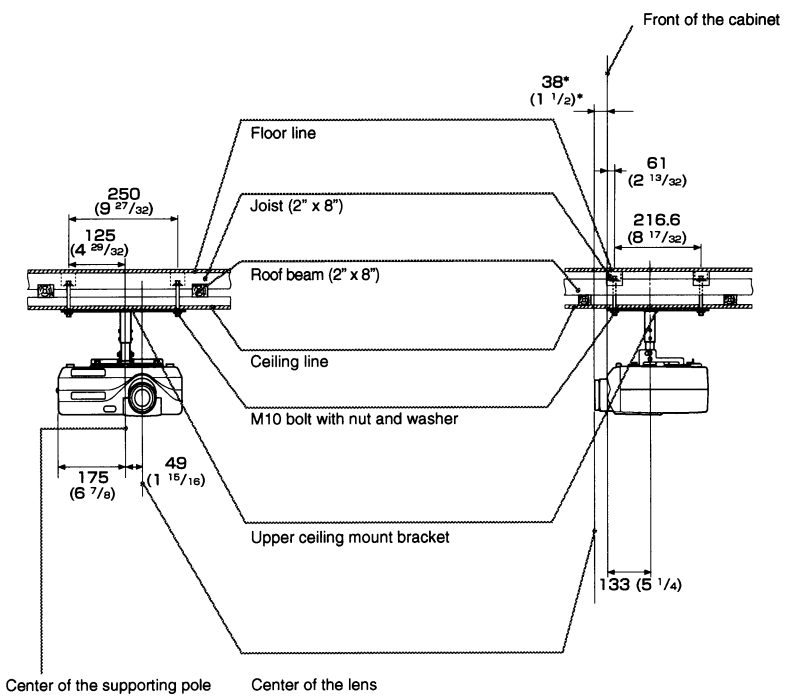


* When using the standard lens equipped with VPL-X600U/E/M / S600U/E/M

Units : mm (inches)

Installation Examples

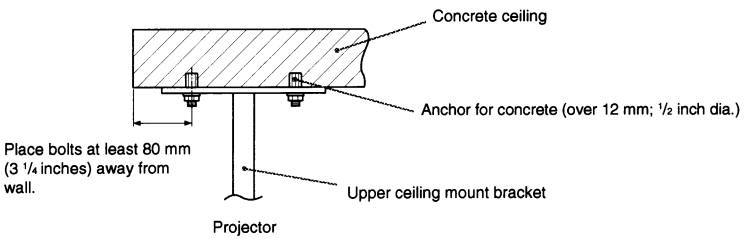
For other floors



* When using the standard lens equipped with VPL-X600U/E/M / S600U/E/M

Units : mm (inches)

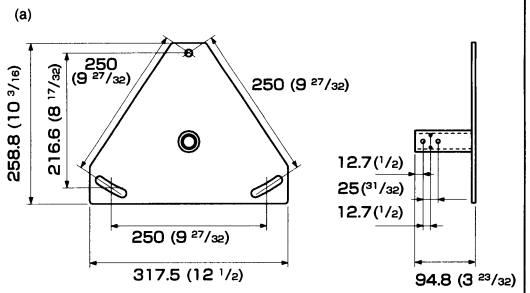
For concrete ceiling


Concrete ceiling
Anchor for concrete (over 12 mm; 1/2 inch dia.)
Place bolts at least 80 mm
(3 1/4 inches) away from
wall.
Upper ceiling mount bracket
Projector

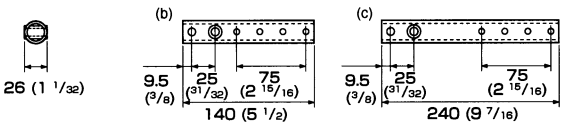
Specifications

Dimensions

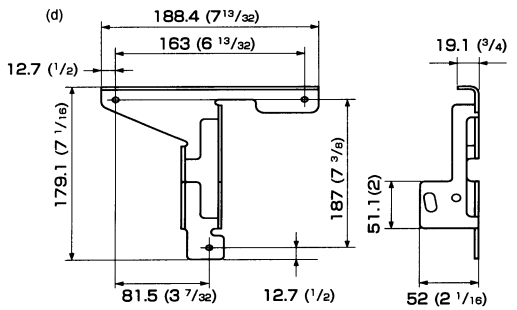
Upper ceiling mount bracket



Adjustment pipes



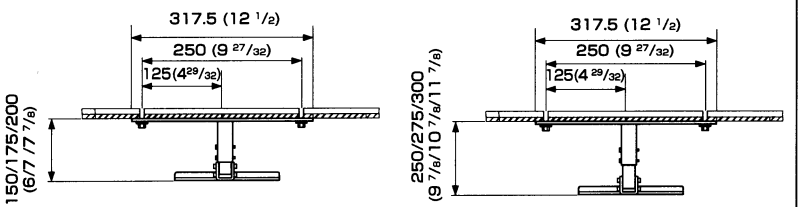
Projector mount bracket



Units : mm (inches)

Dimensions of the assembled bracket

Front view



Units : mm (inches)

Mass Approx. 2.7 kg (5 lb 15 oz)

Loading Maximum loading :10 kg (22 lb 1 oz)

Design and specifications are subject to change without notice.

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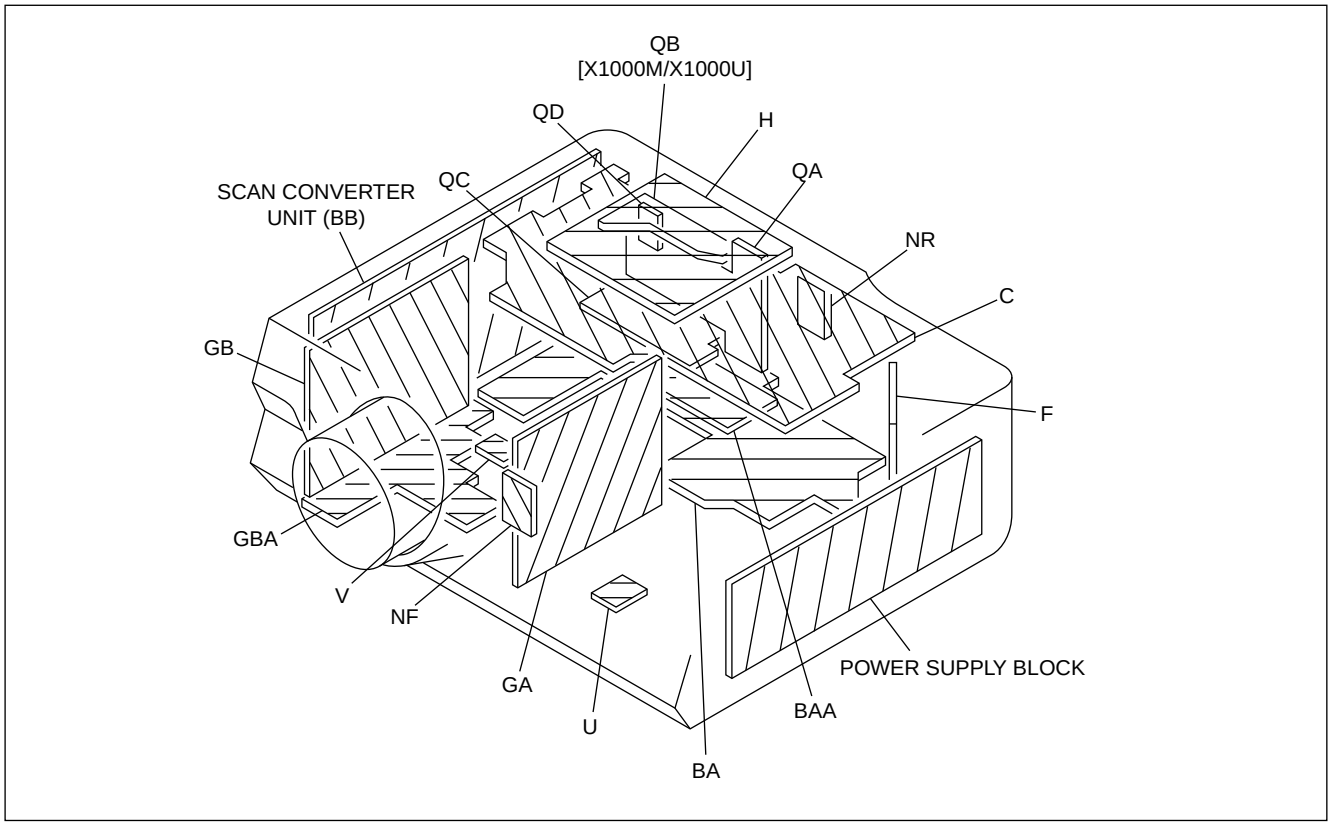
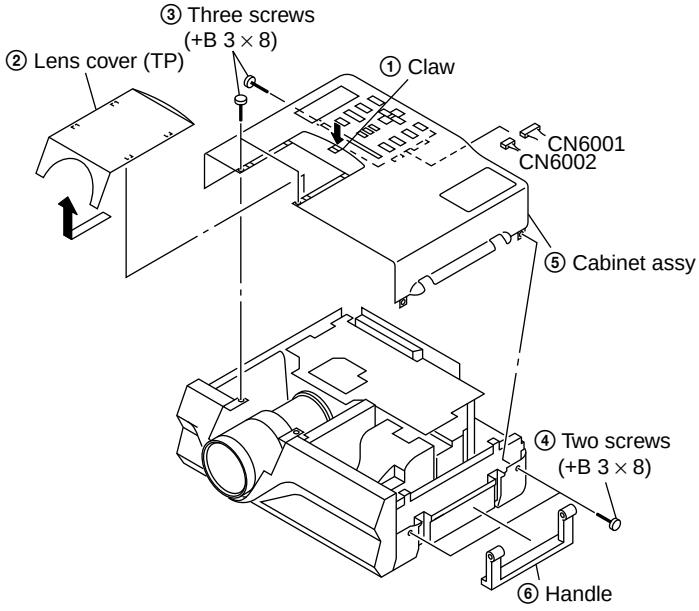
SECTION 2
SERVICE INFORMATIONS

2-1. CIRCUIT BOARDS LOCATION

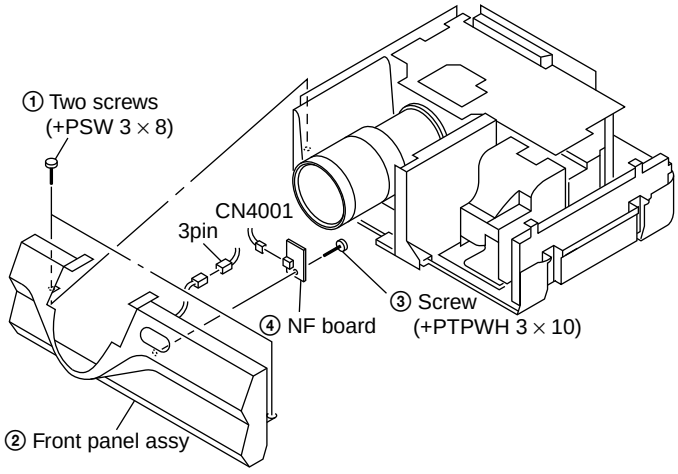


2-2. DISASSEMBLY

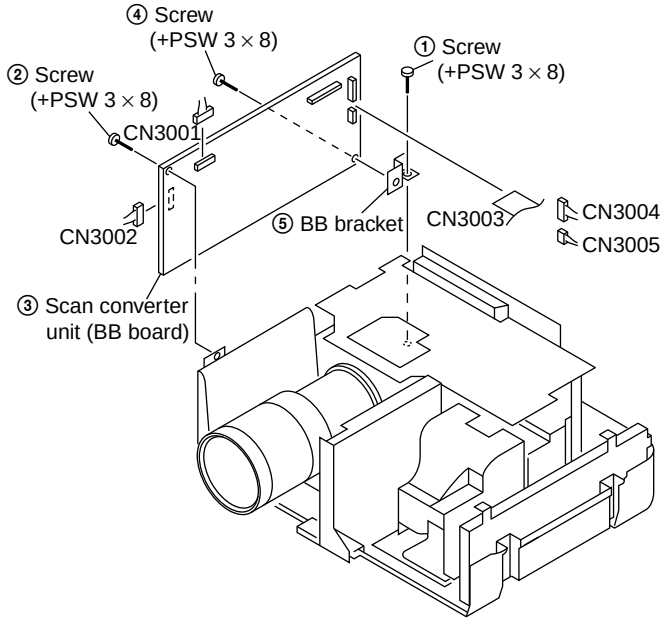
2-2-1. Cabinet Assy Removal



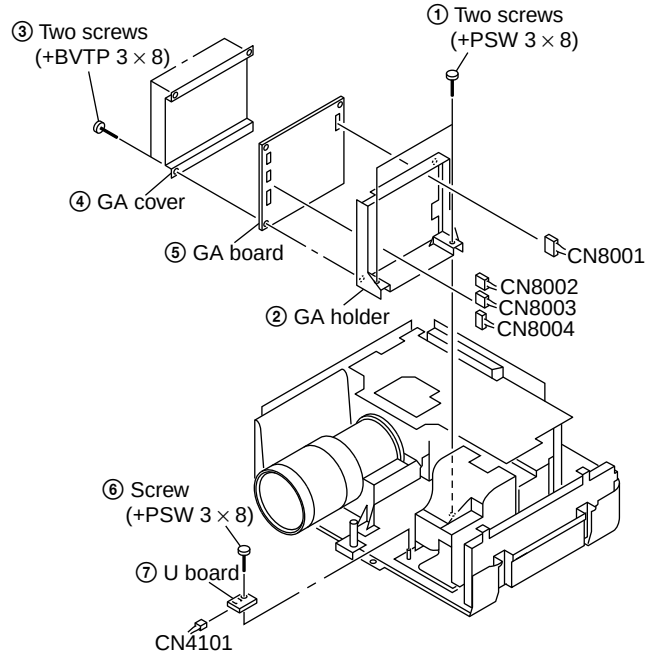
2-2-2. Front Panel Assy and NF Board Removal



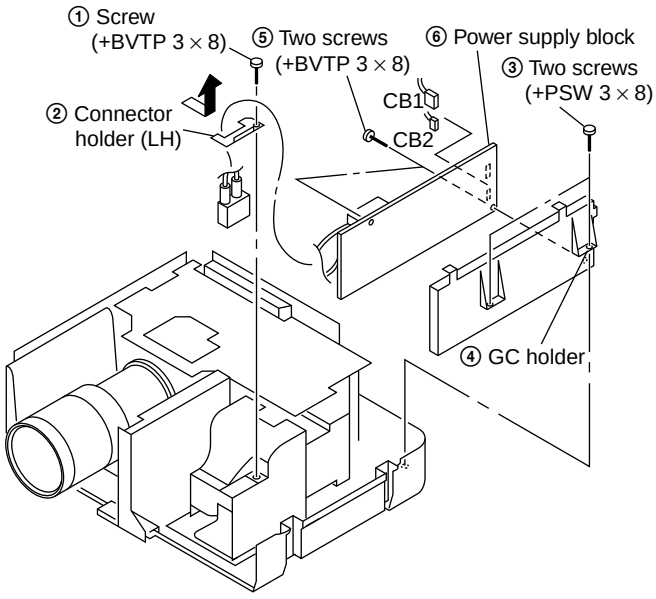
2-2-3. Scan Converter Unit Removal



2-2-4. GA and U Boards Removal

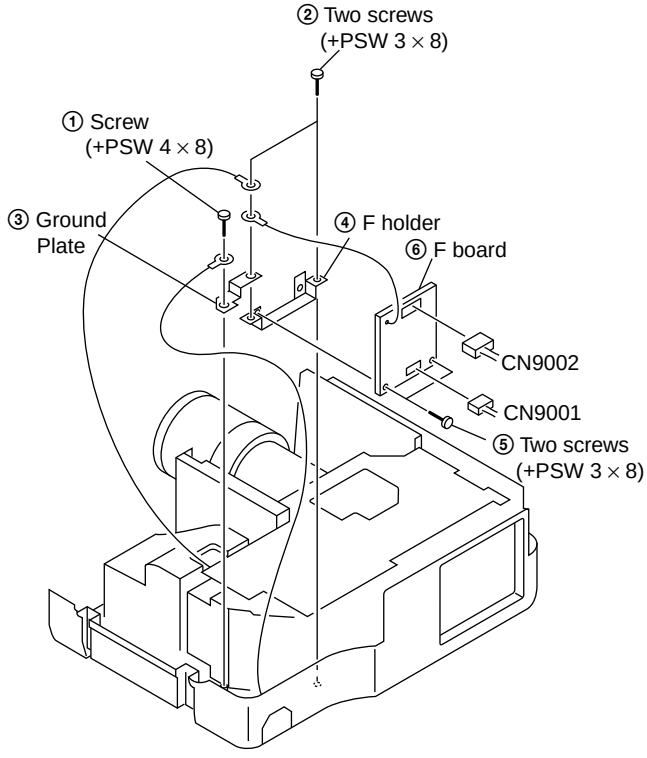


2-2-5. Power Supply Block Removal

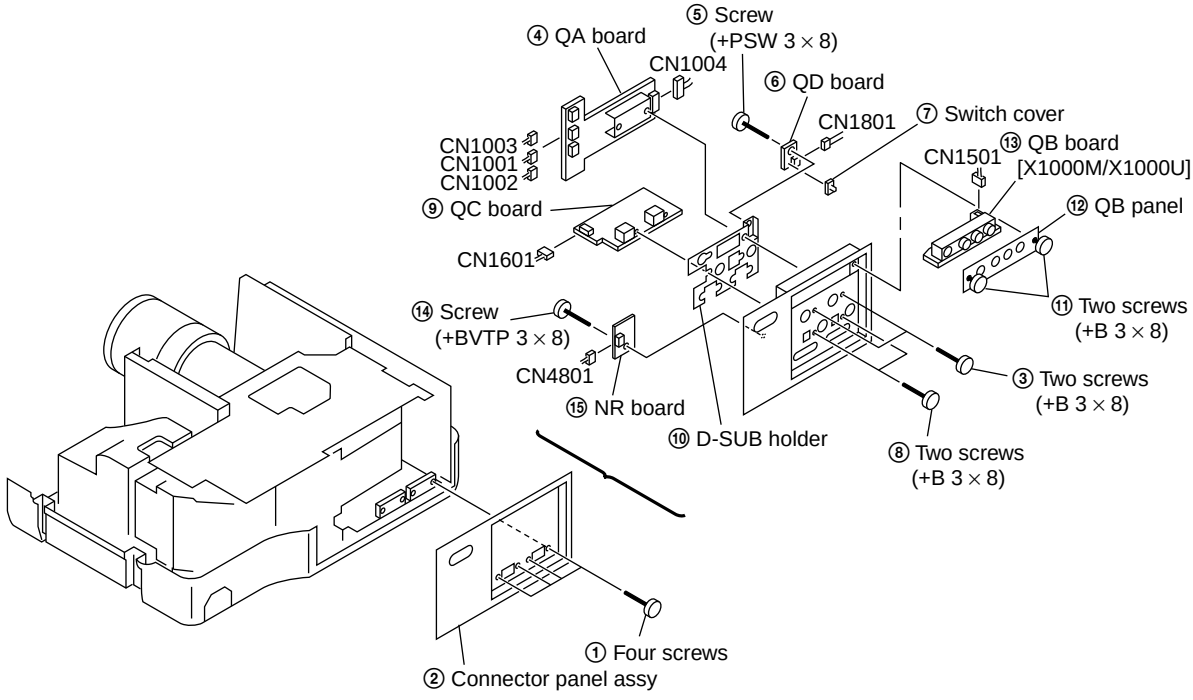


2-2-6. F Board Removal

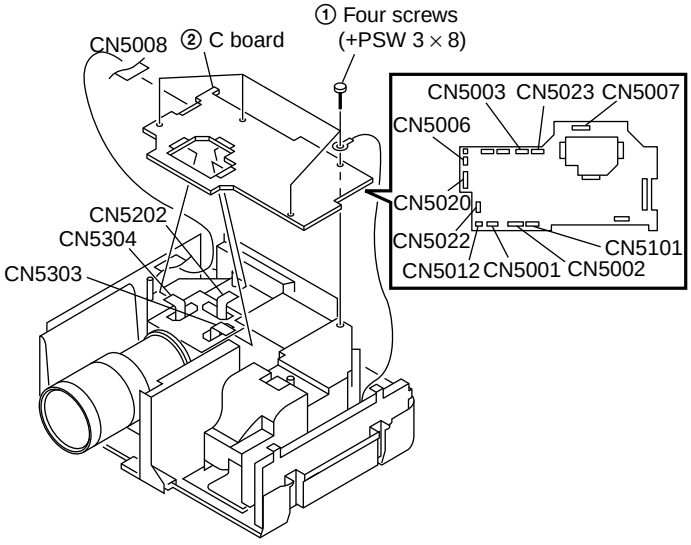
- Remove the power supply block. (Refer to 2-2-5.)



2-2-7. Connector Panel Assy, QA, QB, QC, QD and NR Boards Removal

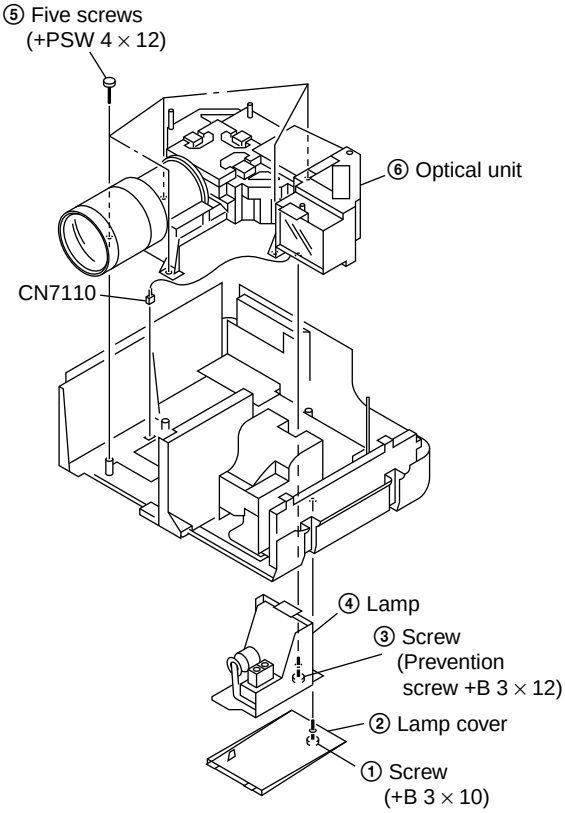


2-2-8. C Board Removal



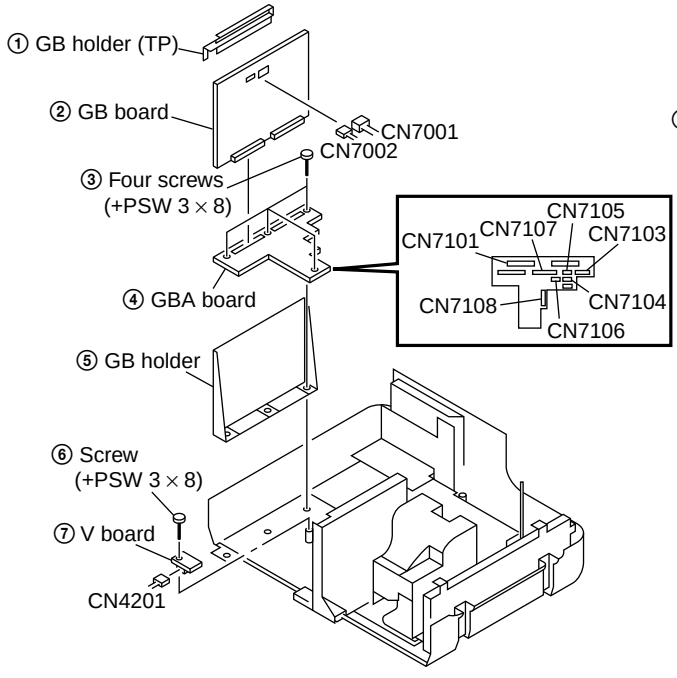
2-2-9. Optical Unit Removal

- Remove the C board (Refer to 2-2-8.)



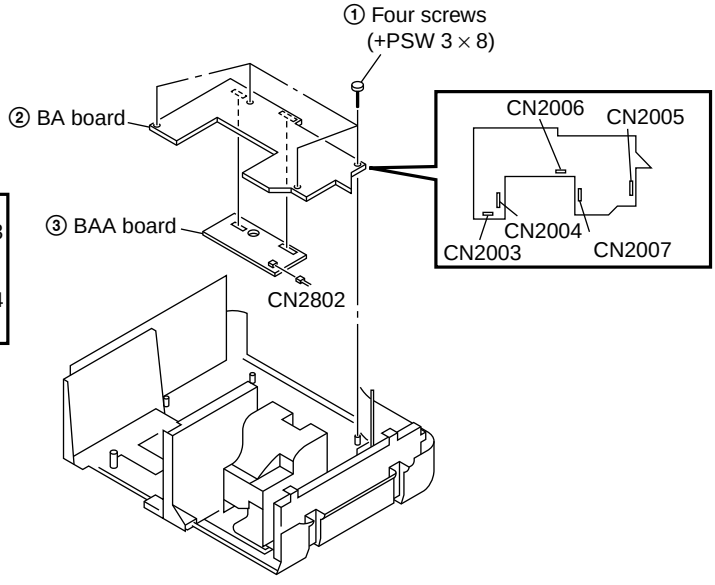
2-2-10. GB, GBA and V Boards Removal

- Remove the scan converter unit (Refer to 2-2-3.)
- Remove the C board (Refer to 2-2-8.)
- Remove the optical unit (Refer to 2-2-9.)

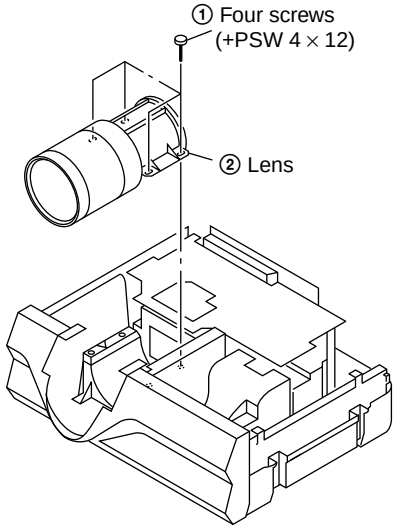


2-2-11. BA and BAA Boards Removal

- Remove the connector panel assy (Refer to 2-2-7.)
- Remove the C board (Refer to 2-2-8.)
- Remove the optical unit (Refer to 2-2-9.)



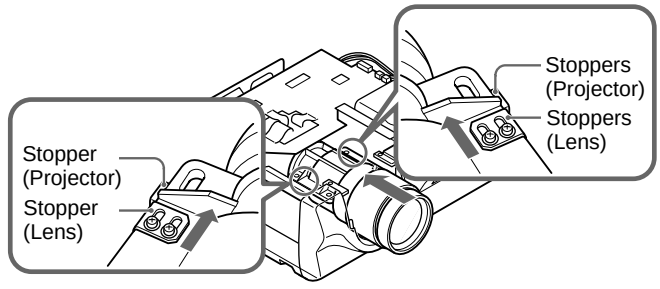
2-2-12. Lens Removal



2-2-13. Lens Adjustment

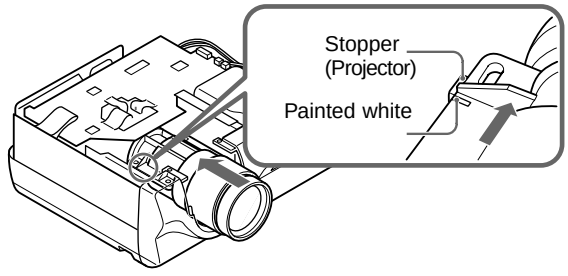
Install the lens with the lens stopper and the projector stopper met at their edges.

Notes:
- **When you install the standard lens, make sure that lens stoppers and projector stoppers are met on both sides.**
- **For ease in identification when you install the lens, make sure that the label on the lens is facing up.**



When the lens does not have a stopper

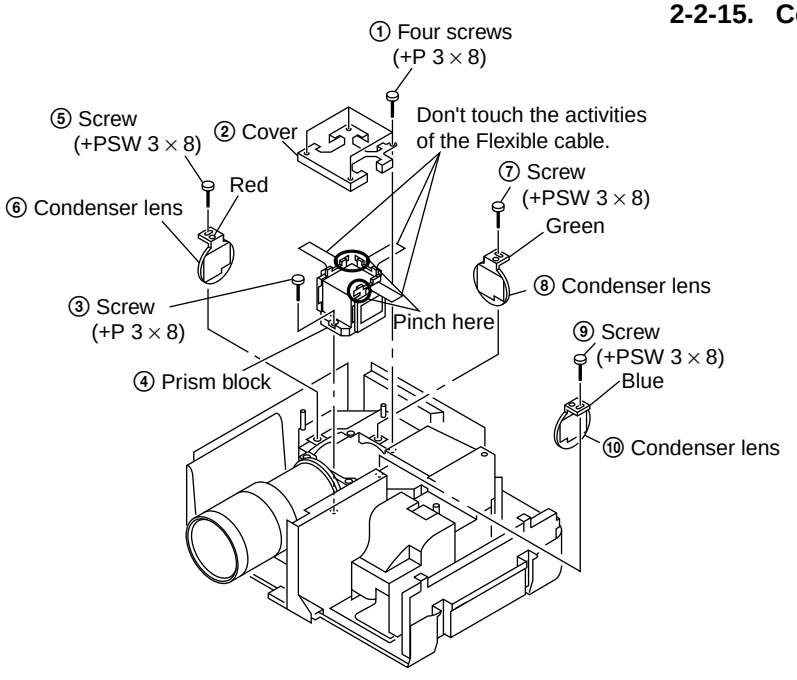
Align the painted white mark (▭) on the lens with the edge of the stopper in the projector.



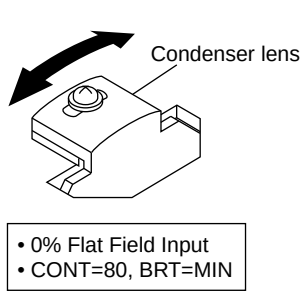
2-2-14. Prism Block and Condenser Lens Removal

- Remove the C board (Refer to 2-2-8.)

Note : Don't touch prism glass and LCD panel, especially the activities of the Flexible cable.



2-2-15. Condenser Lens Adjustment



- 0% Flat Field Input
- CONT=80, BRT=MIN

gM

SECTION 3
ADJUSTMENTS

Enter the FACTORY MODE in the following manner:

How to enter the FACTORY MODE:

1. Check that the STATUS in the MENU is ON.
2. Turn OFF the MENU.
3. Press the keys ENTER → ENTER → LEFT → ENTER, in this order.
4. <Do you wish to enter into the FACTORY MODE ?> appears.
5. Select YES.

3-1. VCOM ADJUSTMENT

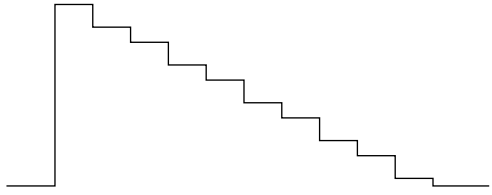
1. Input the green single-color 1H inverted signal to the INPUT A.
2. Set both CONTRAST and BRIGHT to 50.
3. The G VCOM adjustment screen of the Device Adjust appears.
4. Select the point at which the flicker is minimum.
5. Input the red and blue single-color 1H inverted signal, respectively, and adjust R VCOM and B VCOM so that the flicker will be a minimum.
6. Save the adjusted value.

3-2. SIGNAL LEVEL ADJUSTMENT

γ MODE : GRAPHICS
INPUT A : 10 steps
VIDEO : 100% COLOR BAR
Set CONTRAST to 80 and BRIGHT to 50 (RESET).
W/B : HIGH mode
RGB MTRX GK/ENB : 0

3-2-1. RGB Level Adjustment

1. Adjust M52337 R, G, and B GAIN, as well as M52337 R, G, and B BIAS, so that the levels of TP5106, TP5105, and TP5104 will be within the specification.
2. Save the adjustment value.
   RGB LEVEL specifications.
   All of TP5106, TP5105, and TP5104
   0 IRE 2.00 ± 0.02 Vdc
   100 IRE 3.00 ± 0.02 Vdc



3-2-2. VIDEO Level Adjustment

1. COMPONENT VIDEO Adjustment

The Y/color difference signal of the COMPONENT input must be adjusted using the following inputs signal.
Y = 0.7 V ped-100 IRE
R-Y/B-Y = 0.7 V p-p

1. Reduce the Color to MIN.
2. Connect the Component 100% color bar signal to the INPUT A.
3. Adjust M52337 R, G and B GAIN and M52337 R, G and B BIAS respectively until signal level at TP5106, TP5105 and TP5104 satisfies the specifications.
4. Save the adjustment value.
5. Return the Color to 50.
   VIDEO LEVEL specifications
   TP5014
   0 IRE 2.00 ± 0.05 V dc
   100 IRE 2.90 ± 0.05 Vdc
   Do not touch the CXA1839 VIDEO CONT and YUV CONT.

2. COMPOSITE VIDEO Adjustment

1. Reduce the Color to MIN.
2. Connect the NTSC 100% color bar signal to the VIDEO.
3. Adjust the CXA1839 CONTRAST and BRIGHT until signal level at TP5104 satisfies the specifications.
4. Save the adjustment value.
5. Connect the PAL 100% color bar signal to the VIDEO.
6. Adjust the CXA1839 CONTRAST and BRIGHT until signal level at TP5104 satisfies the specifications.
7. Memorize the adjustment value.
8. Return the Color to 50.

   VIDEO LEVEL specifications

   TP5014

   0 IRE 2.00 ± 0.05 V dc

   100 IRE 2.90 ± 0.05 Vdc

3-2-3. Adjustment of VIDEO SUB HUE and COLOR

1. Set both VIDEO and INPUT A to Color to 40.
2. Set “b = c” by means of CXA1839 SUB HUE so that the level of TP5104 will be within the specification.

   Set “a = d” by means of CXA1839 VIDEO COLOR or YUV COLOR.

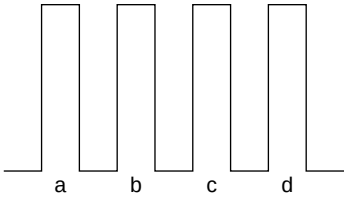
   Adjust the tracking of the above two items.
3. Save the adjustment value.

   Adjust NTSC, PAL, and Component, respectively.

   Adjust PAL only by VIDEO COLOR.

   Adjust the Component only by YUV COLOR.
4. Return the Color back to 50.

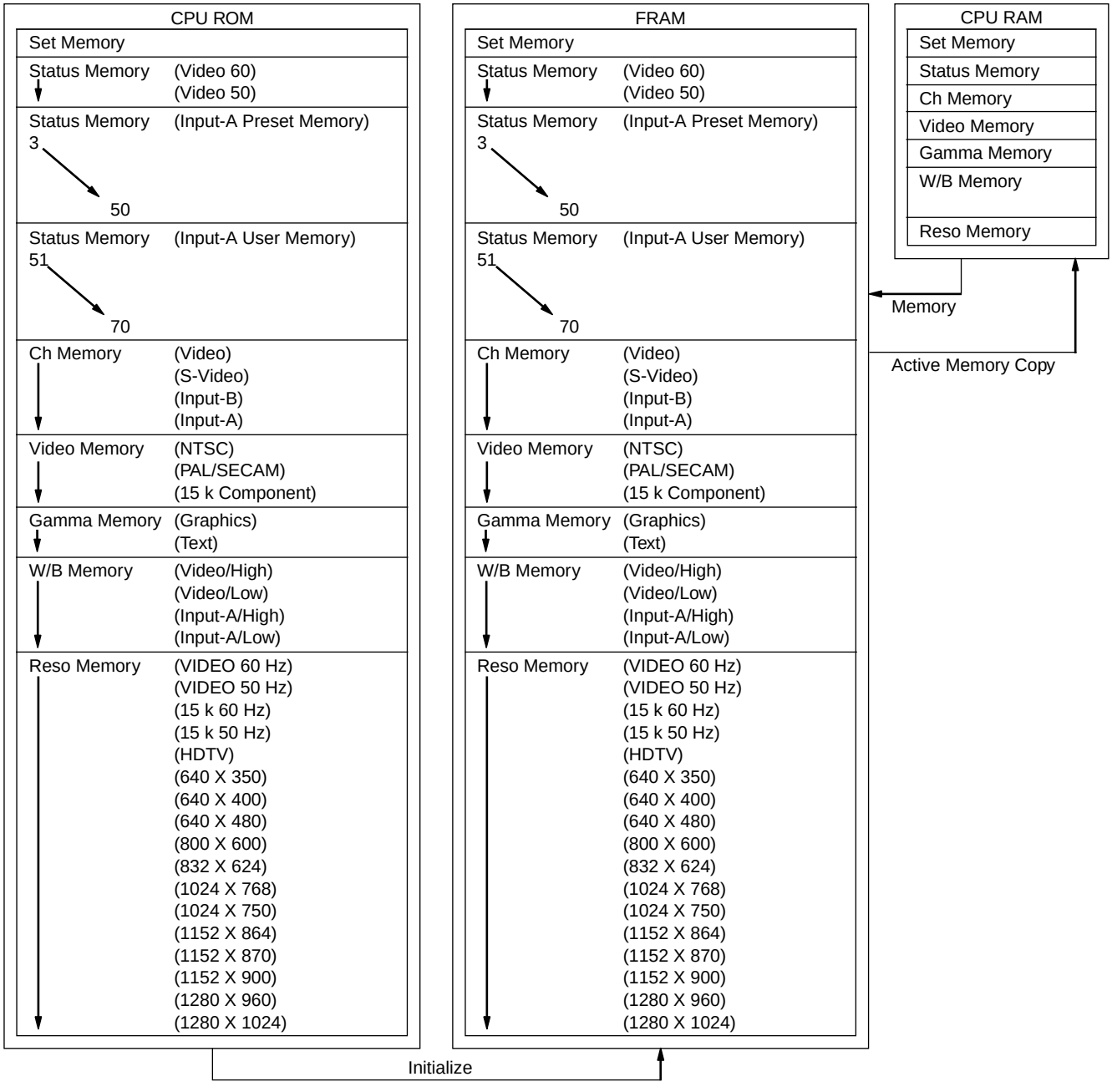
   Specifications for VIDEO COLOR HUE adjustment:



TP5104: a = b ± 10%

3-3. X1000&S900 SERIES MEMORY STRUCTURE

ROM in CPU: 128 kbyte Flash Memory
RAM in CPU: 4 kbyte
External NVM Memory: 2 kbyte FRAM Memory × 2


CPU ROM
Set Memory
Status Memory (Video 60) (Video 50)
Status Memory (Input-A Preset Memory) 3 50
Status Memory (Input-A User Memory) 51 70
Ch Memory (Video) (S-Video) (Input-B) (Input-A)
Video Memory (NTSC) (PAL/SECAM) (15 k Component)
Gamma Memory (Graphics) (Text)
W/B Memory (Video/High) (Video/Low) (Input-A/High) (Input-A/Low)
Reso Memory (VIDEO 60 Hz) (VIDEO 50 Hz) (15 k 60 Hz) (15 k 50 Hz) (HDTV) (640 X 350) (640 X 400) (640 X 480) (800 X 600) (832 X 624) (1024 X 768) (1024 X 750) (1152 X 864) (1152 X 870) (1152 X 900) (1280 X 960) (1280 X 1024)
FRAM
Set Memory
Status Memory (Video 60) (Video 50)
Status Memory (Input-A Preset Memory) 3 50
Status Memory (Input-A User Memory) 51 70
Ch Memory (Video) (S-Video) (Input-B) (Input-A)
Video Memory (NTSC) (PAL/SECAM) (15 k Component)
Gamma Memory (Graphics) (Text)
W/B Memory (Video/High) (Video/Low) (Input-A/High) (Input-A/Low)
Reso Memory (VIDEO 60 Hz) (VIDEO 50 Hz) (15 k 60 Hz) (15 k 50 Hz) (HDTV) (640 X 350) (640 X 400) (640 X 480) (800 X 600) (832 X 624) (1024 X 768) (1024 X 750) (1152 X 864) (1152 X 870) (1152 X 900) (1280 X 960) (1280 X 1024)
CPU RAM
Set Memory
Status Memory
Ch Memory
Video Memory
Gamma Memory
W/B Memory
Reso Memory
Memory
Active Memory Copy
Initialize

The memory structure of X1000 & S900 Series basically follows 600 Series and is divided into the following memory blocks:

1. Set memory
2. Status memory
3. Channel memory
4. Video memory
5. Gamma memory
6. W/B memory
7. Reso Memory

The X1000 & S900 Series differs from the 600 Series as follows.

1. The memory is divided into the VIDEO system memory (including 15 k Component/HDTV) system and the RGB system memory in the “6. W/B Memory”.
2. “7. Reso Memory” is added.

<Data flow>

When the power is turned on for the first time, all data in the ROM are written into the FRAM, and status memory, as well as other memory data necessary for the present image, is selected from each memory block and developed in the internal CPU RAM.

When adjustment is made, the writing of adjusted data into the FRAM is conducted automatically or triggered by memory operation.

Like 600 Series, the factory memory, service memory, and user memory are unified into one. The data that has been set in the factory will be deleted when any adjustments or any memory operation is performed by user or during service. However, there are two memory blocks that can be reset and will cause no problems even when data that has been adjusted in the factory is deleted. That two memory blocks are "2. Status Memory" and "3. Channel Memory".

Adjustment Data and Initial Value 1

Menu Title	Item Name	Memory Name								
		CH MEMORY				W/B MEMORY				SET MEMORY
		VIDEO	S VIDEO	INPUT-A	INPUT-B	VIDEO		RGB		
						HIGH	LOW	HIGH	LOW	
PICTURE CTRL	CONTRAST	80	80	80	80					
	BRIGHT	50	50	50	50					
	COLOR	50	50	50	50					
	HUE	50	50	50	50					
	SHARP	50	50	50	50					
	D.PICTURE	OFF	OFF	—	—					
	GAMMA MODE	—	—	GRAPHI-CS	GRAPHI-CS					
	COLOR TEMP	LOW	LOW	HIGH	HIGH					
	COLOR SYS	AUTO	AUTO	—	—					
	VOLUME	50	50	50	50					
INPUT SETTING	DOT PHASE	Each Signal		Each Signal	Each Signal					
	SIZE									
	SHIFT									
	ASPECT	4 : 3		—	—					
	SCAN CONV	—		ON	ON					
SET SETTING	STATUS									ON
	INPUT-A									RGB
	INPUT-B									RGB
	LANGUAGE									ENGLISH
	INSTALLATION									FLOOR-FRONT
	SPEAKER									ON
	POWER SAVING									OFF
	SIRCS RECEIVER									FRONT&REAR
W/B ADJUST	GAIN R					81	83	89	94	
	GAIN G					69	74	89	84	
	GAIN B					88	88	89	94	
	BIAS R					194	193	195	195	
	BIAS G					194	193	194	193	
	BIAS B					193	192	194	194	

* Each input signal (PRESET MEMORY No.) has its own initial value with respect to "DOT PHASE•SIZE H•SHIFTH/V" on the "INPUT SETTING" menu.

http://getMANUAL.com

Adjustment Data and Initial Value 2

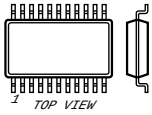
Device Name	Item Name	Memory Name												Remark
		SET MEMORY	SIGNAL MEMORY			GAMMA MEMORY		W/B MEMORY				STATUS MEMORY	STATUS MEMORY	
			NTSC	PAL/ SECAM	YUV			VIDEO		RGB				
						GRAPH	TEXT	HIGH	LOW	HIGH	LOW			
RGB MTRX	CONTRAST		35	36	44									
	BRIGHT		30	30	33									
	SUB HUE		10	7	7									
	SUB BRT		7	7	7									
	R-Y/R		11	11	10									fixed value
	R-Y/B		13	13	13									fixed value
	G-Y/R		6	6	6									fixed value
	G-Y/B		5	5	5									fixed value
	VIDEO CON		7	7	7									fixed value
	VIDEO COL		12	13	7									
	YUV CON		7	7	4									fixed value
	YUV COL		7	7	10									
	SUB SHP		1	1	1									fixed value
	SHPF0		1	1	1									fixed value
	PRE OVER		3	3	1									fixed value
	NR LVL		3	3	0									fixed value
	DMIC PIC	2												fixed value
	CEC LVL		3	3	2									fixed value
D.COM	VENH	0												fixed value
A.P.	LOUDNESS	0												fixed value
	BASS	2												fixed value
	BASS_ BOOST	0												fixed value
	TREBLE	0												fixed value
	TREBLE_ BOOST	0												fixed value
	FADER	10												fixed value
	FADER_SEL	0												fixed value
C.DEC	Y DELAY		0 (dummy)	0 (dummy)	0 (dummy)									fixed value
GK	ENB		1	1	0									
	PKG		36	36	36									
	SP		45	45	45									
	CR		20	20	20									
P.DRV	G VCOM	23												
	R VCOM	50												
	B VCOM	48												
	SCEN	147												
RGB AMP	SID LVL	164												
	OSD LVL	83												fixed value
	PRG LVL	60												fixed value
UF	RL1							50	50	50	50			fixed value
	RL2							50	50	50	50			fixed value

Device Name	Item Name	Memory Name												Remark
		SET MEMORY	SIGNAL MEMORY			GAMMA MEMORY		W/B MEMORY				STATUS MEMORY	STATUS MEMORY	
			NTSC	PAL/ SECAM	YUV			VIDEO		RGB				
						GRAPH	TEXT	HIGH	LOW	HIGH	LOW			
UF	RL3							50	50	50	50			fixed value
	BL1							50	50	50	50			fixed value
	BL2							50	50	50	50			fixed value
	BL3							50	50	50	50			fixed value
	RP1							255`	255	255	255			fixed value
	RP2							0	0	0	0			fixed value
	BP1							255	255	255	255			fixed value
	BP2							0	0	0	0			fixed value
GAMMA	BLK LIM					100	100							
	OSD_DOT	0												fixed value
	G-SBRT					168	178							
	R-SBRT					168	178							
	B-SBRT					150	160							
	G GAIN					147	80							
	R GAIN					144	82							
	B GAIN					156	91							
	G B2P					218	218							fixed value
	G B1P					204	202							
	G WHP					37	37							
	R B2P					218	218							fixed value
	R B1P					204	204							
	R WHP					37	37							
	B B2P					218	218							
	B B1P					197	197							
	B WHP					37	37							
	GAMMA OFF	0												
TG	SLFR	0												fixed value
	GAMMA SH2					71	71							
	GAMMA SH1					11	11							
SC	PLL CP DIV	0												
	SHOGA	0												
	Iv END MAX											Each signal		fixed value
	SYNCHRO Fv											Each signal		fixed value
	VinitEV												Each Reso.	
	VinitOd												Each Reso.	
	Sluten												Each Reso.	fixed value
	ScSlut0												Each Reso.	fixed value
	ScSlut1												Each Reso.	fixed value
	ScSlut2												Each Reso.	fixed value
	ScSlut3												Each Reso.	fixed value
	ScSlut4												Each Reso.	fixed value

Device Name	Item Name	Memory Name												Remark
		SET MEMORY	SIGNAL MEMORY			GAMMA MEMORY		W/B MEMORY				STATUS MEMORY	STATUS MEMORY	
			NTSC	PAL/ SECAM	YUV			VIDEO		RGB				
						GRAPH	TEXT	HIGH	LOW	HIGH	LOW			
SC	ScSlut5												Each Reso.	fixed value
	ScSlut6												Each Reso.	fixed value
	ScSlut7												Each Reso.	fixed value
	TempLamp	448												fixed value
	TempPanel	608												fixed value

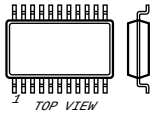
SECTION 4
SEMICONDUCTORS

74VHC240SJX
M62399FP
TC74HC541AF
TEA2025D



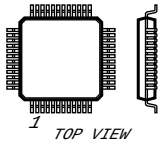
20pin SOP

BR24CF16F
LM358PS
MAX1626ESA
MM1111XFBE
MM1112XFBE
NJM2240M
SN75157PS
SN75453BPS
TA75W393FU
TC74WH74FU
TC7W00F
TC7W126FU
TC7W240FU
TL082CPS
TL431BCDR2
UPC393G2



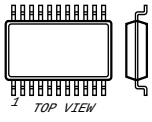
8pin SOP

CXA1839Q-T6
CXA1946AR
M62370GP-650D



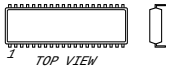
48ipn QFP

CXA1875AM
EL4332CS
MM1231XFBE
PC74HC123D-T
TC74VHC123AF
TDA4665T-T



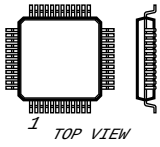
16pin SOP

CXA2016S



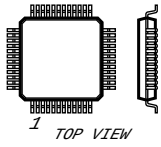
22pin DIP

CXA2111R



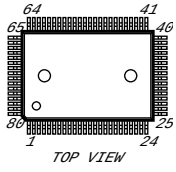
52pin QFP

CXA2112R

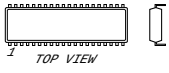


52pin QFP

CXD2024AQ

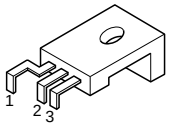


FA5331P

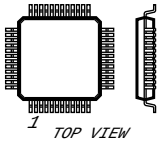


16pin DIP

GPIU28X

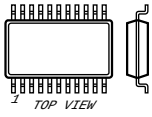


HD64F3048F16



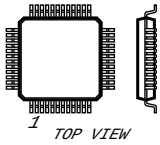
100pin QFP

RCV2



18pin SOP

ISPLSI1016E

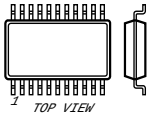


44pin QFP

M52337SP

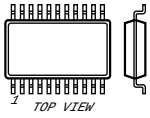
36pin DIP

M52755FP-TP



36pin SOP

MB90096PF



28pin SOP

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UCC2801N

8pin DIP

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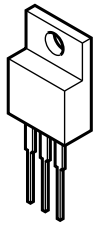

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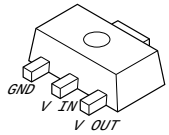
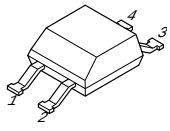


PC123F2
PC123FY2



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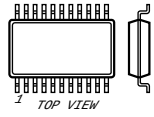
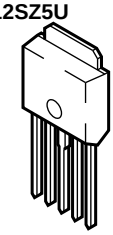
TC74VHCT02AFT
TC74VHCT04AFT

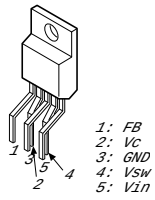


14pin SOP

PQ12SZ5U



PQ20VZ5U



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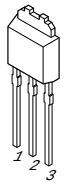
TA78M09F



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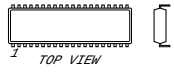
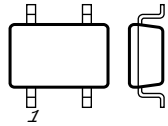


14pin DIP

TC7S04FU
TC7ST04FU
TC7W08FU



5pin CHIP

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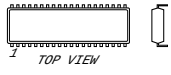

32pin DIP

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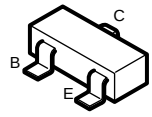
2SA1162-YG
2SB709A-QRS
2SC3545-T43
DTA144EKA-T146
DTC114EKA
DTC144EKA-T146



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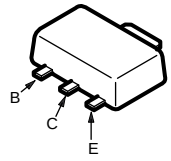

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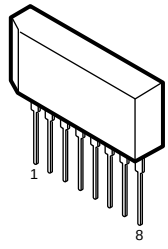
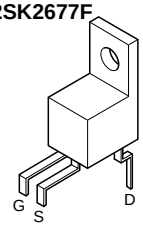
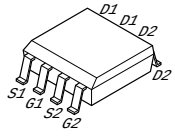


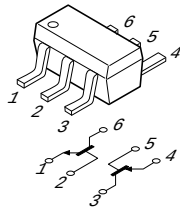
2SK2677F



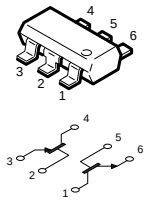
SI-9430DY-T1



HN1B01FU



XN4601



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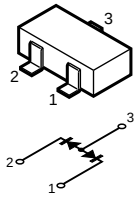
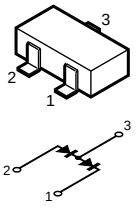


MA157-TX



1SS355
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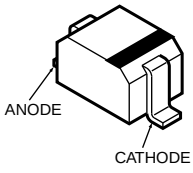
RB501V-40TE-17
RB5.1SB
RD3.3SB2-T1
RD9.1S-B2
RD9.1SB2-T1



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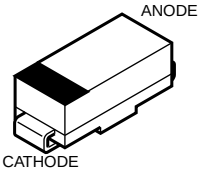

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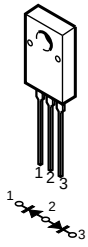

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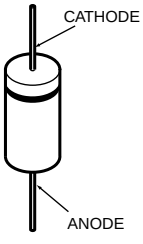

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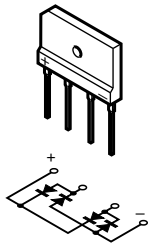

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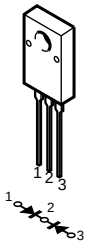

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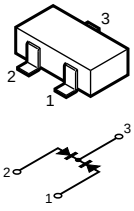

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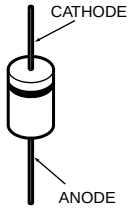

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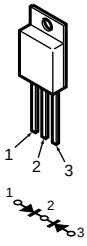
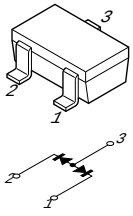
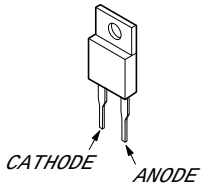
FCQ20A04



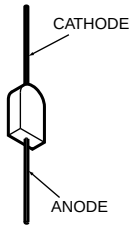
FMG-G2CS



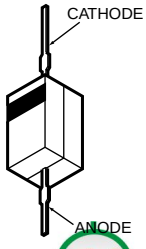
FSF10A60



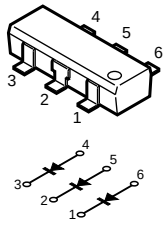
HVU359TRF



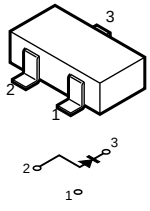
P6KE200AG23



PC357N2T



RD12M-B2
RD13M-B2



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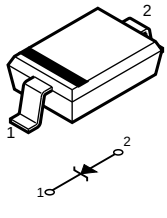
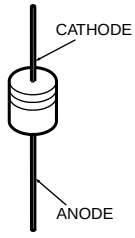
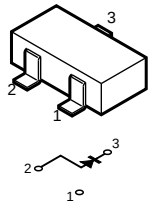


RD6.8SB2



RD7.5M-B2



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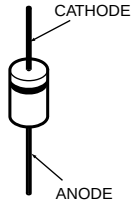
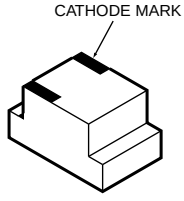


SEC1201C
SEC1401C
SEC1901C



SECTION 5
EXPLODED VIEWS

NOTE :

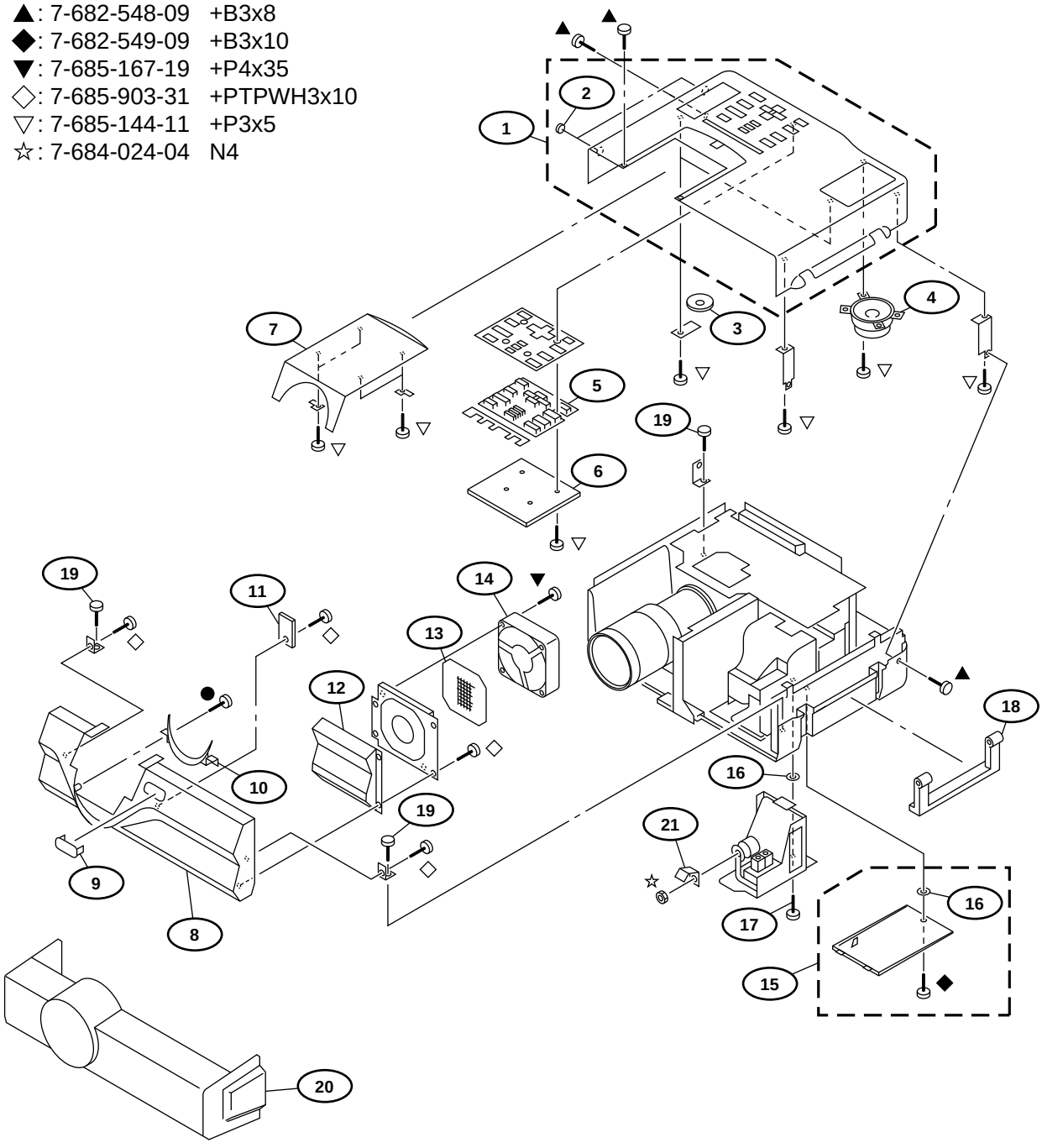
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

5-1. CABINET BLOCK

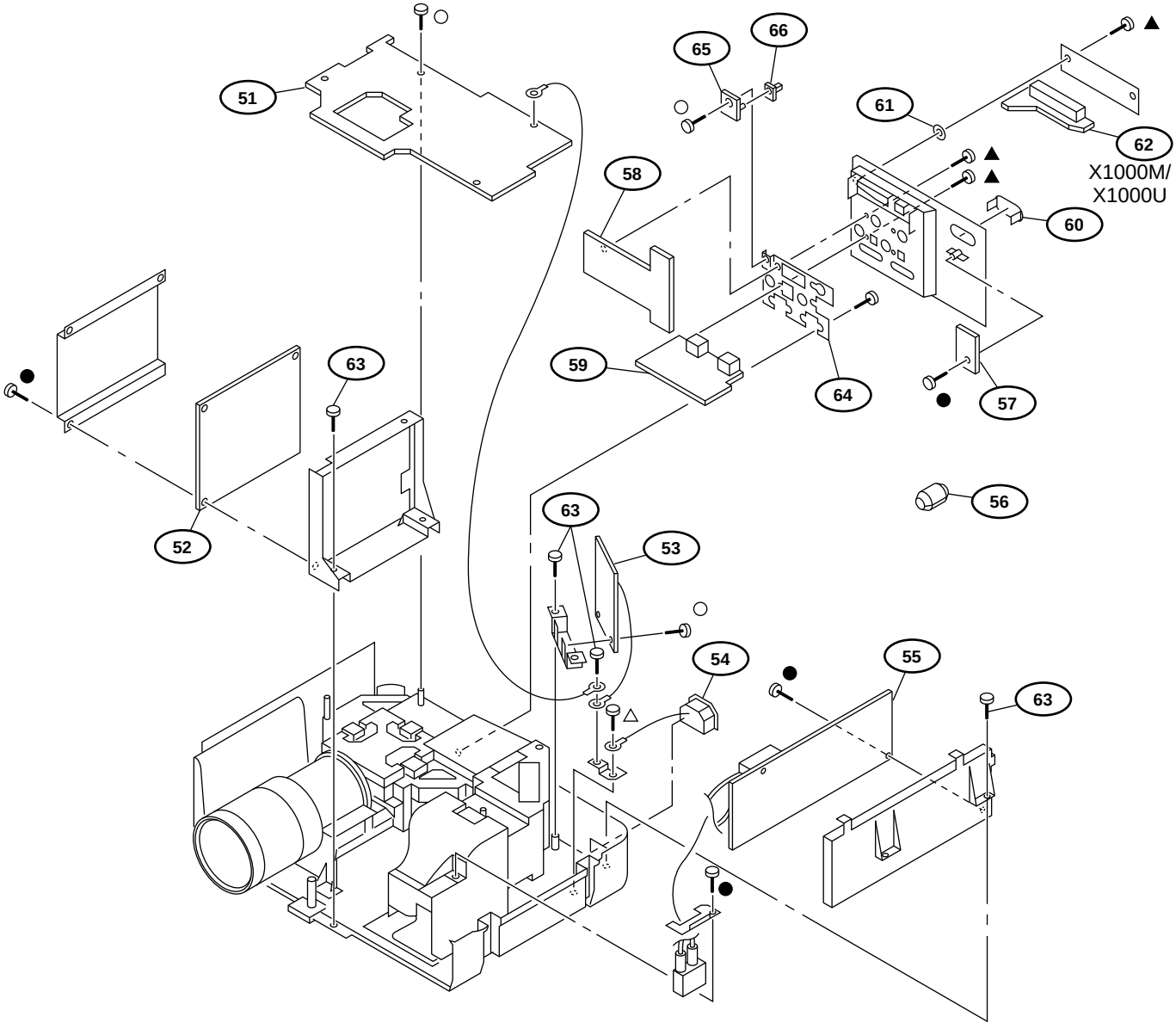
●: 7-685-646-79 +BVTP3x8
▲: 7-682-548-09 +B3x8
◆: 7-682-549-09 +B3x10
▼: 7-685-167-19 +P4x35
◇: 7-685-903-31 +PTPWH3x10
▽: 7-685-144-11 +P3x5
☆: 7-684-024-04 N4



Rf.NO.	PART NO.	DESCRIPTION	REMARK
1	* X-4035-432-1	HOOD ASSY	2
2	* 4-063-685-01	FOOT	
3	1-504-847-11	SPEAKER (2.8CM)	
4	1-505-282-11	SPEAKER (057F006)	
5	4-063-624-01	BUTTON, CONTROL	
6	* A-1375-172-A	H COMPL	
7	* 4-063-632-01	COVER (TP), LENS	
8	* 4-063-631-21	PANEL, FRONT	
9	* 4-063-676-01	WINDOW (FR), RM	
10	* 4-063-653-01	COVER (BT), LENS	
11	* 1-668-126-11	PWB, NF	
12	* 4-063-640-01	DUCT (EX)	
13	* 4-063-995-01	NET, FAN	
14	1-763-070-11	FAN, DC	
15	* X-4035-436-1	LAMP COVER ASSY	16
16	* 3-715-526-01	WASHER (M3)	
17	4-396-203-01	SCREW (+B M3X12), PREVENTION	
18	* 4-063-641-01	HANDLE	
19	4-382-854-01	SCREW (M3X8), P, SW (+)	
20	* X-4035-681-1	COVER ASSY, FRONT	
21	* 4-065-573-01	GUARD (LMP), LIGHTING	

5-2. CHASSIS BLOCK

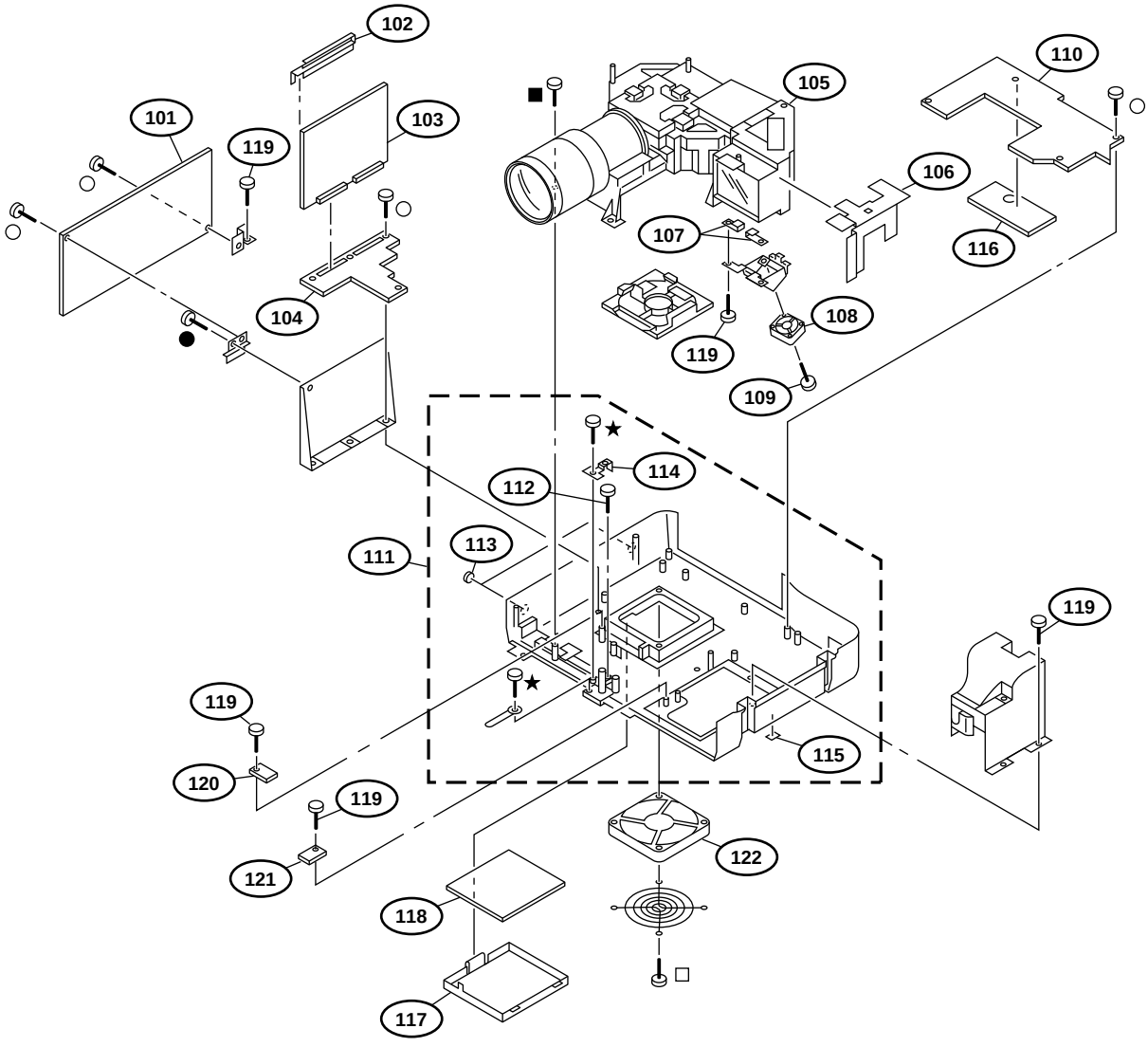
●: 7-685-646-79 +BVTP3x8
▲: 7-682-548-09 +B3x8
○: 7-682-948-01 +PSW3x8
△: 7-682-961-01 +PSW4x8



Rf.NO.	PART NO.	DESCRIPTION	REMARK
51	*A-1335-114-A	C COMPL	
52	*A-1316-340-B	GA COMPL	
53	*A-1241-314-A	F MOUNT	
54	⚠1-526-954-11	INLET, AC	
55	1-468-286-11	POWER BLOCK	
56	1-500-249-11	BEAD, FERRITE (CASE)	
57	*1-668-127-11	PWB, NR	
58	*A-1275-150-D	QA COMPL	
59	*A-1275-169-A	QC COMPL	
60	4-063-677-01	WINDOW (RE), RM	
61	*3-715-526-01	WASHER (M3)	
62	*1-668-130-15	PWB, QB (X1000M/X1000U)	
63	4-382-854-01	SCREW (M3X8), P, SW (+)	
64	*4-068-769-01	HOLDER, D-SUB	
65	*1-672-792-11	PWB,QD	
66	4-068-767-01	COVER, SWITCH	

5-3. BASE BLOCK

● : 7-685-646-79 +BVTP3x8
○ : 7-682-948-01 +PSW3x8
■ : 7-682-663-09 +PSW4x12
□ : 7-682-667-09 +PSW4x25
★ : 7-682-647-09 +PS3x6



Rf.NO.	PART NO.	DESCRIPTION	REMARK
101	1-475-689-51	CONVERTER UNIT, SCAN (BB)	
102	* 4-063-633-01	HOLDER (TP), GB	
103	⚠* A-1316-433-A	GB COMPL	
104	* A-1316-369-B	GBA COMPL	
105	1-758-289-11	OPTICAL UNIT	152-171
106	* 4-064-095-01	GUARD (A), LIGHTING	
107	4-064-094-01	NUT, SPRING	
108	1-763-101-11	FAN, DC	
109	4-382-854-21	SCREW (M3X14), P, SW (+)	
110	* A-1135-988-A	BA COMPL	
111	* X-4036-378-1	BASE ASSY	112-115

Rf.NO.	PART NO.	DESCRIPTION	REMARK
112	4-063-994-01	MACHNE SCREW (+PWH M3X8)	
113	* 4-063-685-01	FOOT	
114	* 4-064-059-01	BRACKET, GBA	
115	* 4-064-163-01	CUSHION, HANDLE	
116	* A-1135-987-A	BAA COMPL	
117	4-063-639-01	COVER, FILTER	
118	4-063-684-01	FILTER	
119	4-382-854-01	SCREW (M3X8), P, SW (+)	
120	* 1-668-124-11	PWB, V	
121	* 1-668-125-11	PWB, U	
122	1-763-069-11	FAN, DC	

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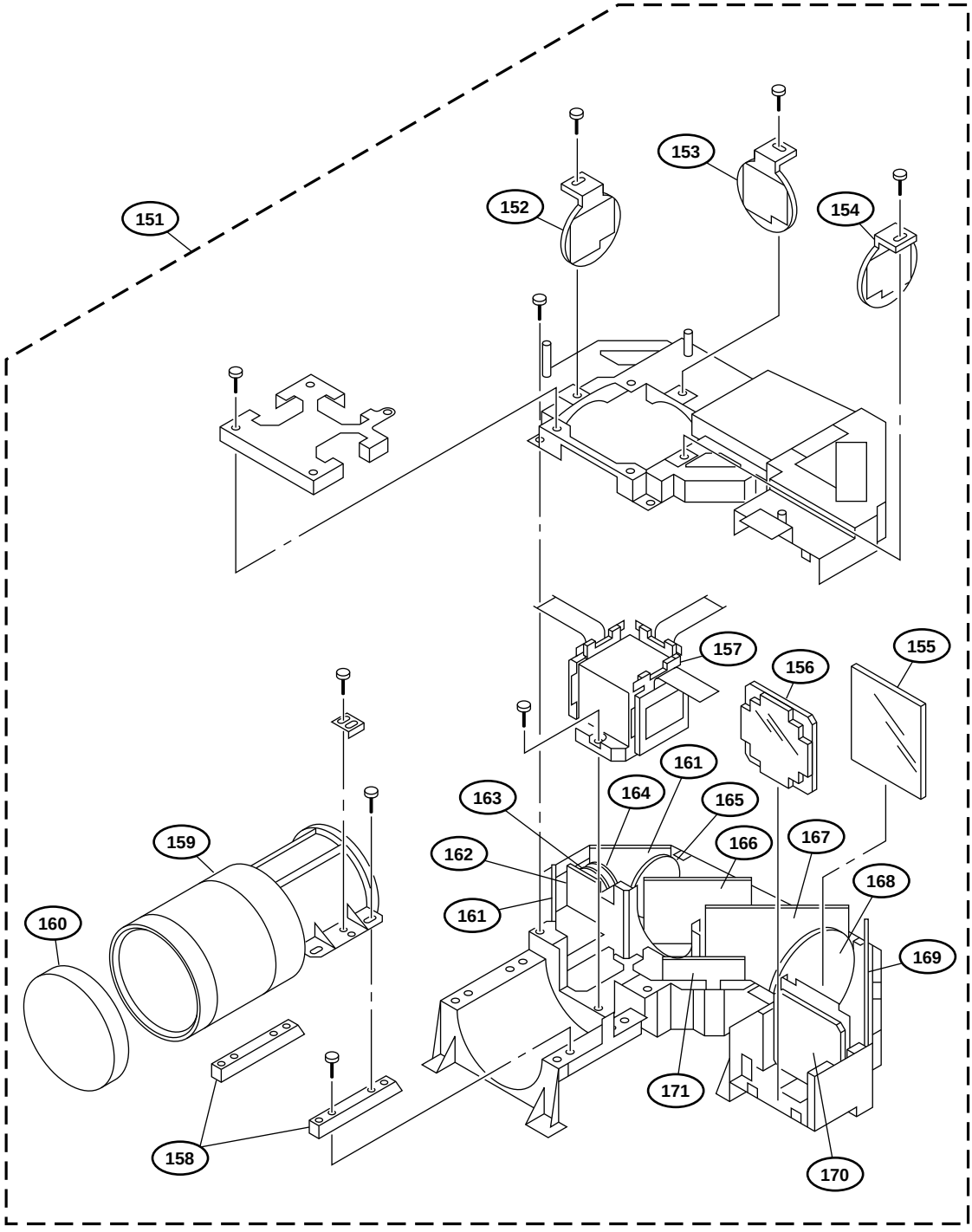
5-4. OPTICAL UNIT BLOCK



Rf.NO.	PART NO.	DESCRIPTION	REMARK
151	1-758-289-11	OPTICAL UNIT	152-171
152	9-880-349-01	POLARIZATION PLATE (R)/ CONDENSER LENS	
153	9-880-347-01	POLARIZATION PLATE (G)/ CONDENSER LENS	
154	9-882-678-01	POLARIZATION PLATE (B)/ CONDENSER LENS	
155	9-880-346-01	PS CONVERTER	
156	9-880-344-01	FLYEYE LENS A	
157	A-1501-464-A	PRISM BLOCK ASSY	
158	9-880-355-01	SPACER, COMPLETE	
159	9-882-677-01	PROJECTION LENS	
160	9-880-361-01	LENS CAP	

Rf.NO.	PART NO.	DESCRIPTION	REMARK
161	9-880-353-01	MIRROR B	
162	9-880-360-01	FILTER, RED	
163	9-880-359-01	LENS C, RELAY	
164	9-880-358-01	LENS B, RELAY	
165	9-880-357-01	LENS A, RELAY	
166	9-880-351-01	DICHROIC MIRROR (G)	
167	9-880-350-01	DICHROIC MIRROR (B)	
168	9-880-356-01	MAIN CONDENSER LENS	
169	9-880-352-01	MIRROR A	
170	9-880-345-01	FLYEYE LENS B	
171	9-880-354-01	MIRROR C	

SECTION 6
ELECTRICAL PARTS LIST

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- PF : μμF

- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

BA

Rf.NO.	PART NO.	DESCRIPTION			REMARK
	* A-1135-988-A	BA COMPL			
		**********			
	<CAPACITOR>				
C2001	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2002	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2003	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2004	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2005	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2006	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2007	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2008	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2009	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2010	1-107-686-11	TANTAL. CHIP	4.7µF	20%	16V
C2011	1-107-686-11	TANTAL. CHIP	4.7µF	20%	16V
C2012	1-107-686-11	TANTAL. CHIP	4.7µF	20%	16V
C2013	1-107-686-11	TANTAL. CHIP	4.7µF	20%	16V
C2014	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2015	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2016	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2018	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2019	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2020	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2021	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C2022	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C2023	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2024	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C2025	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C2026	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C2027	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2028	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C2033	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2034	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2037	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2038	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2039	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2040	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2041	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2042	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2043	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2044	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2045	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C2046	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2047	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C2048	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2049	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2050	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2051	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2052	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2053	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2054	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2055	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2056	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2057	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2058	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C2059	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2060	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2061	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2062	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2063	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2065	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2069	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2070	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2071	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2078	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2079	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2080	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2081	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2082	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2083	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2084	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2085	1-124-779-00	ELECT CHIP	10µF	20%	16V
C2086	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2087	1-124-779-00	ELECT CHIP	10µF	20%	16V
C2089	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C2090	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2091	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2092	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2093	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2094	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C2099	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2106	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2116	1-124-779-00	ELECT CHIP	10µF	20%	16V
C2117	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2118	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2119	1-107-686-11	TANTAL. CHIP	4.7µF	20%	16V
C2120	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2121	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2122	1-107-686-11	TANTAL. CHIP	4.7µF	20%	16V
C2123	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2125	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2126	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C2127	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2128	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2129	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C2130	1-107-686-11	TANTAL. CHIP	4.7µF	20%	16V
C2131	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2132	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V
C2134	1-163-089-00	CERAMIC CHIP	6PF	0.5PF	50V
C2135	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2136	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2137	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2138	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C2139	1-164-346-11	CERAMIC CHIP	1µF		16V
C2140	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2141	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2142	1-107-686-11	TANTAL. CHIP	4.7µF	20%	16V
C2143	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C2144	1-126-941-11	ELECT	470µF	20%	25V
C2145	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2146	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2147	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C2148	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C2154	1-163-237-11	CERAMIC CHIP	27PF	5%	50V

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C2158	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2160	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2163	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2164	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2165	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2166	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2167	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2168	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2169	1-124-779-00	ELECT CHIP	10µF	20%	16V
C2170	1-126-193-11	ELECT CHIP	1µF	20%	50V
C2171	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2172	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2173	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2174	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2175	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2176	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2177	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2178	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2179	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2180	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2181	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C2182	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C2185	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2186	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2187	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2188	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2189	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2190	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C2192	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2195	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2196	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2197	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2200	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2216	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2219	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C2220	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C2221	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2222	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C2223	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C2224	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C2225	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2226	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2227	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2231	1-117-154-11	ELECT	33µF	20%	16V
C2234	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C2235	1-117-154-11	ELECT	33µF	20%	16V
C2301	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2302	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2303	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2304	1-128-416-11	ELECT CHIP	100µF	20%	16V
C2305	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2306	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2307	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2308	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2309	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2310	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2311	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C2312	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2313	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C2314	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2315	1-163-089-00	CERAMIC CHIP	6PF	0.5PF	50V
C2316	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2317	1-117-154-11	ELECT	33µF	20%	16V
C2318	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2319	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2320	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2321	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2322	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2323	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C2501	1-117-681-11	ELECT CHIP	100µF	20%	16V
C2502	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2503	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V

<CONNECTOR>

CN2001	1-784-828-11	CONNECTOR, D SUB
CN2002	1-784-828-11	CONNECTOR, D SUB
CN2003	1-573-806-21	PIN, CONNECTOR (1.5MM) (SMD)6P
CN2004	* 1-766-383-11	PIN, CONNECTOR (1.5MM)(SMD)12P
CN2005	* 1-766-382-11	PIN, CONNECTOR (1.5MM)(SMD)10P
CN2006	1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD)4P
CN2007	* 1-691-591-11	PIN, CONNECTOR (1.5MM) (SMD)8P
CN2008	* 1-785-763-11	CONNECTOR,BOARD TO BOARD 18P
CN2009	* 1-785-764-11	CONNECTOR,BOARD TO BOARD 28P

<DIODE>

D2001	8-719-800-76	DIODE 1SS226
D2002	8-719-800-76	DIODE 1SS226
D2003	8-719-800-76	DIODE 1SS226
D2004	8-719-800-76	DIODE 1SS226
D2005	8-719-800-76	DIODE 1SS226
D2006	8-719-800-76	DIODE 1SS226
D2007	8-719-106-23	DIODE RD7.5M-B2
D2008	8-719-800-76	DIODE 1SS226
D2009	8-719-106-23	DIODE RD7.5M-B2
D2010	8-719-800-76	DIODE 1SS226
D2012	8-719-158-37	DIODE RD9.1SB2
D2013	8-719-158-37	DIODE RD9.1SB2
D2014	8-719-158-37	DIODE RD9.1SB2
D2015	8-719-914-43	DIODE DAN202K
D2016	8-719-800-76	DIODE 1SS226
D2017	8-719-800-76	DIODE 1SS226
D2018	8-719-158-37	DIODE RD9.1SB2
D2301	8-719-914-43	DIODE DAN202K
D2501	8-719-914-43	DIODE DAN202K

<FILTER>

FL2001	1-239-397-11	FILTER, LOW PASS
FL2002	1-239-397-11	FILTER, LOW PASS
FL2003	1-239-397-11	FILTER, LOW PASS
FL2004	1-234-089-21	FILTER, EMI (SMD)
FL2009	1-234-089-21	FILTER, EMI (SMD)

BA

Rf.NO.	PART NO.	DESCRIPTION	REMARK
	<IC>		
IC2001	8-752-072-94	IC CXA1875AM-T4	
IC2002	8-759-522-86	IC M52755FP-TP	
IC2003	8-752-073-52	IC CXA2016S	
IC2004	8-752-073-52	IC CXA2016S	
IC2005	8-759-491-93	IC EL4332CS-TE2	
IC2006	8-759-272-90	IC 74VHC240SJX	
IC2007	8-759-272-90	IC 74VHC240SJX	
IC2008	8-759-387-75	IC TC7W00F(TE12R)	
IC2012	8-759-492-19	IC MM1231XFBE	
IC2014	8-759-335-57	IC MM1112XF	
IC2015	8-759-295-47	IC TDA9141-N2C	
IC2016	8-759-565-20	IC TDA4665T/V5-118	
IC2017	8-759-335-57	IC MM1112XF	
IC2018	8-752-070-54	IC CXA1839Q-T6	
IC2022	8-752-072-94	IC CXA1875AM-T4	
IC2025	8-759-524-85	IC IC TC7W240FU(TE12R)	
IC2026	8-759-432-78	IC MM1111XFBE	
IC2027	8-759-186-43	IC TC74VHC123AF	
IC2301	8-752-372-78	IC CXD2024AQ	
IC2302	8-759-711-62	IC NJM2240M	
IC2501	8-759-572-04	IC TDA9178-S0	
	<COIL>		
L2001	1-410-671-31	INDUCTOR	47µH
L2011	1-414-235-22	INDUCTOR CHIP	0µH
L2012	1-414-235-22	INDUCTOR CHIP	0µH
L2013	1-414-235-22	INDUCTOR CHIP	0µH
L2014	1-414-235-22	INDUCTOR CHIP	0µH
L2015	1-412-363-21	FERRITE	0µH
L2016	1-412-363-21	FERRITE	0µH
L2017	1-412-363-21	FERRITE	0µH
L2023	1-414-235-22	INDUCTOR CHIP	0µH
L2024	1-414-235-22	INDUCTOR CHIP	0µH
L2025	1-414-235-22	INDUCTOR CHIP	0µH
L2026	1-414-235-22	INDUCTOR CHIP	0µH
L2027	1-412-796-41	INDUCTOR	47µH
L2028	1-414-235-22	INDUCTOR CHIP	0µH
L2029	1-414-235-22	INDUCTOR CHIP	0µH
L2301	1-414-267-11	INDUCTOR	10µH
L2302	1-414-267-11	INDUCTOR	10µH
L2303	1-414-267-11	INDUCTOR	10µH
	<TRANSISTOR>		
Q2001	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2002	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2003	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2004	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2005	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2006	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2007	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2008	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2009	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2010	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2011	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2012	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2013	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2014	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2015	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2016	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2017	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2018	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2019	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2020	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2021	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2022	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2023	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2024	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2025	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2026	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2027	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2028	8-729-107-31	TRANSISTOR 2SC3545-T43	
Q2029	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2030	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2031	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2032	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2035	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2036	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2037	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2038	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2039	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2040	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2041	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2301	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2302	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q2303	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2304	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2305	8-729-230-49	TRANSISTOR 2SC2712-YG	
	<RESISTOR>		
R2001	1-216-295-91	SHORT	0
R2002	1-216-295-91	SHORT	0
R2003	1-216-295-91	SHORT	0
R2004	1-216-295-91	SHORT	0
R2005	1-216-049-91	RES,CHIP	1K 5% 1/10W
R2006	1-216-039-00	RES,CHIP	390 5% 1/10W
R2007	1-216-049-91	RES,CHIP	1K 5% 1/10W
R2008	1-216-039-00	RES,CHIP	390 5% 1/10W
R2009	1-216-625-11	METAL CHIP	82 0.50% 1/10W
R2010	1-216-295-91	SHORT	0
R2011	1-216-295-91	SHORT	0
R2012	1-216-295-91	SHORT	0
R2013	1-216-625-11	METAL CHIP	82 0.50% 1/10W
R2014	1-216-625-11	METAL CHIP	82 0.50% 1/10W
R2015	1-216-073-00	RES,CHIP	10K 5% 1/10W
R2016	1-216-025-91	RES,CHIP	100 5% 1/10W
R2017	1-216-025-91	RES,CHIP	100 5% 1/10W
R2018	1-216-025-91	RES,CHIP	100 5% 1/10W
R2019	1-216-025-91	RES,CHIP	100 5% 1/10W
R2020	1-216-025-91	RES,CHIP	100 5% 1/10W
R2021	1-216-025-91	RES,CHIP	100 5% 1/10W
R2022	1-216-085-00	RES,CHIP	33K 5% 1/10W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R2023	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R2024	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R2025	1-216-085-00	RES,CHIP	33K	5%	1/10W
R2026	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R2027	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R2028	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2029	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2030	1-216-025-91	RES,CHIP	100	5%	1/10W
R2031	1-216-025-91	RES,CHIP	100	5%	1/10W
R2032	1-216-025-91	RES,CHIP	100	5%	1/10W
R2033	1-216-025-91	RES,CHIP	100	5%	1/10W
R2034	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2035	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2036	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2037	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2038	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2039	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2040	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2041	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2042	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2043	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2044	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2045	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2046	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2047	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R2048	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2049	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R2050	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R2051	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R2052	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2053	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R2054	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R2055	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R2056	1-216-025-91	RES,CHIP	100	5%	1/10W
R2057	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2058	1-216-081-00	RES,CHIP	22K	5%	1/10W
R2059	1-216-041-00	RES,CHIP	470	5%	1/10W
R2060	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2061	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2062	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2063	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2064	1-216-017-91	RES,CHIP	47	5%	1/10W
R2065	1-216-017-91	RES,CHIP	47	5%	1/10W
R2066	1-216-085-00	RES,CHIP	33K	5%	1/10W
R2067	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2068	1-216-085-00	RES,CHIP	33K	5%	1/10W
R2069	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2070	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R2071	1-216-041-00	RES,CHIP	470	5%	1/10W
R2072	1-216-656-11	METAL CHIP	1.6K	0.50%	1/10W
R2073	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R2074	1-216-041-00	RES,CHIP	470	5%	1/10W
R2075	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R2076	1-216-041-00	RES,CHIP	470	5%	1/10W
R2077	1-216-041-00	RES,CHIP	470	5%	1/10W
R2078	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2079	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2080	1-216-067-00	RES,CHIP	5.6K	5%	1/10W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R2081	1-216-043-91	RES,CHIP	560	5%	1/10W
R2082	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2083	1-216-043-91	RES,CHIP	560	5%	1/10W
R2084	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R2085	1-216-043-91	RES,CHIP	560	5%	1/10W
R2086	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2087	1-216-041-00	RES,CHIP	470	5%	1/10W
R2088	1-216-025-91	RES,CHIP	100	5%	1/10W
R2089	1-216-025-91	RES,CHIP	100	5%	1/10W
R2092	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2093	1-216-081-00	RES,CHIP	22K	5%	1/10W
R2095	1-216-025-91	RES,CHIP	100	5%	1/10W
R2096	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R2097	1-216-043-91	RES,CHIP	560	5%	1/10W
R2099	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R2100	1-216-025-91	RES,CHIP	100	5%	1/10W
R2101	1-216-025-91	RES,CHIP	100	5%	1/10W
R2102	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2103	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2104	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2105	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2106	1-216-025-91	RES,CHIP	100	5%	1/10W
R2107	1-216-025-91	RES,CHIP	100	5%	1/10W
R2108	1-216-295-91	SHORT	0		
R2109	1-216-295-91	SHORT	0		
R2110	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R2111	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R2112	1-216-025-91	RES,CHIP	100	5%	1/10W
R2113	1-216-095-00	RES,CHIP	82K	5%	1/10W
R2114	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R2115	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R2116	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2117	1-216-025-91	RES,CHIP	100	5%	1/10W
R2118	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2119	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2120	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R2121	1-216-043-91	RES,CHIP	560	5%	1/10W
R2122	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R2123	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R2124	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R2125	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2126	1-216-025-91	RES,CHIP	100	5%	1/10W
R2127	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2128	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2129	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2130	1-216-025-91	RES,CHIP	100	5%	1/10W
R2131	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2132	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R2133	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R2134	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2135	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2136	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2137	1-216-025-91	RES,CHIP	100	5%	1/10W
R2138	1-216-033-00	RES,CHIP	220	5%	1/10W
R2139	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R2140	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R2141	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2142	1-216-025-91	RES,CHIP	100	5%	1/10W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R2143	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2144	1-216-295-91	SHORT	0		
R2145	1-216-295-91	SHORT	0		
R2146	1-216-083-00	RES,CHIP	27K	5%	1/10W
R2147	1-216-025-91	RES,CHIP	100	5%	1/10W
R2148	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2149	1-216-025-91	RES,CHIP	100	5%	1/10W
R2151	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2158	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2159	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2167	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2168	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2186	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R2187	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R2188	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2189	1-216-081-00	RES,CHIP	22K	5%	1/10W
R2190	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R2191	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R2192	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R2193	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R2194	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R2195	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R2196	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2197	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2198	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2199	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2200	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2201	1-216-025-91	RES,CHIP	100	5%	1/10W
R2202	1-216-025-91	RES,CHIP	100	5%	1/10W
R2204	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R2205	1-216-629-11	METAL CHIP	120	0.50%	1/10W
R2206	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2207	1-216-631-11	METAL CHIP	150	0.50%	1/10W
R2208	1-216-629-11	METAL CHIP	120	0.50%	1/10W
R2209	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2210	1-216-025-91	RES,CHIP	100	5%	1/10W
R2211	1-216-025-91	RES,CHIP	100	5%	1/10W
R2212	1-216-295-91	SHORT	0		
R2213	1-216-295-91	SHORT	0		
R2214	1-216-295-91	SHORT	0		
R2216	1-216-295-91	SHORT	0		
R2217	1-216-295-91	SHORT	0		
R2218	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R2219	1-216-035-00	RES,CHIP	270	5%	1/10W
R2220	1-216-035-00	RES,CHIP	270	5%	1/10W
R2221	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2222	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2223	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2224	1-216-017-91	RES,CHIP	47	5%	1/10W
R2225	1-216-017-91	RES,CHIP	47	5%	1/10W
R2226	1-216-017-91	RES,CHIP	47	5%	1/10W
R2227	1-216-017-91	RES,CHIP	47	5%	1/10W
R2228	1-216-017-91	RES,CHIP	47	5%	1/10W
R2229	1-216-017-91	RES,CHIP	47	5%	1/10W
R2233	1-216-025-91	RES,CHIP	100	5%	1/10W
R2234	1-216-025-91	RES,CHIP	100	5%	1/10W
R2235	1-216-025-91	RES,CHIP	100	5%	1/10W
R2236	1-216-025-91	RES,CHIP	100	5%	1/10W
R2237	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R2238	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R2239	1-216-295-91	SHORT	0		
R2241	1-216-001-00	RES,CHIP	10	5%	1/10W
R2242	1-247-807-31	CARBON	100	5%	1/4W
R2243	1-247-807-31	CARBON	100	5%	1/4W
R2301	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2302	1-216-025-91	RES,CHIP	100	5%	1/10W
R2303	1-216-025-91	RES,CHIP	100	5%	1/10W
R2304	1-216-025-91	RES,CHIP	100	5%	1/10W
R2306	1-216-033-00	RES,CHIP	220	5%	1/10W
R2307	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R2308	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2309	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R2310	1-216-037-00	RES,CHIP	330	5%	1/10W
R2311	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2312	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2313	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R2314	1-216-025-91	RES,CHIP	100	5%	1/10W
R2315	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R2316	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R2317	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R2318	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R2319	1-216-025-91	RES,CHIP	100	5%	1/10W
R2320	1-216-041-00	RES,CHIP	470	5%	1/10W
R2321	1-216-025-91	RES,CHIP	100	5%	1/10W
R2406	1-216-625-11	METAL CHIP	82	0.50%	1/10W
R2407	1-216-625-11	METAL CHIP	82	0.50%	1/10W
R2408	1-216-625-11	METAL CHIP	82	0.50%	1/10W
R2501	1-216-025-91	RES,CHIP	100	5%	1/10W
R2502	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2503	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2504	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2505	1-216-025-91	RES,CHIP	100	5%	1/10W
R2506	1-216-025-91	RES,CHIP	100	5%	1/10W

<THERMISTOR>

TH2001	1-809-020-11	THERMISTOR
TH2002	1-809-020-11	THERMISTOR

<CRYSTAL>

X2001	1-579-973-11	VIBRATOR, CRYSTAL (3.575611MHz)
X2002	1-760-191-11	VIBRATOR, CRYSTAL (3.579545MHz)
X2003	1-760-191-11	VIBRATOR, CRYSTAL (4.433619MHz)

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* A-1135-987-A BAA COMPL

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<CAPACITOR>

C2801	1-128-004-11	ELECT CHIP	10µF	20%	16V
C2802	1-128-004-11	ELECT CHIP	10µF	20%	16V

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C2803	1-128-453-21	ELECT CHIP	47µF	20%	6.3V
C2804	1-128-453-21	ELECT CHIP	47µF	20%	6.3V
C2805	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2806	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2807	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C2808	1-128-453-21	ELECT CHIP	47µF	20%	6.3V
C2809	1-128-453-21	ELECT CHIP	47µF	20%	6.3V
C2810	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2811	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2812	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C2813	1-128-453-21	ELECT CHIP	47µF	20%	6.3V
C2814	1-128-453-21	ELECT CHIP	47µF	20%	6.3V
C2815	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2816	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2817	1-128-004-11	ELECT CHIP	10µF	20%	16V
C2818	1-163-217-11	CERAMIC CHIP	1PF	0.25PF	50V
C2819	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2820	1-128-004-11	ELECT CHIP	10µF	20%	16V
C2821	1-128-004-11	ELECT CHIP	10µF	20%	16V
C2822	1-128-013-11	ELECT CHIP	1µF	20%	50V
C2823	1-128-004-11	ELECT CHIP	10µF	20%	16V
C2824	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2825	1-126-204-11	ELECT CHIP	47µF	20%	16V
C2826	1-128-004-11	ELECT CHIP	10µF	20%	16V
C2827	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2828	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2829	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2830	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C2831	1-128-004-11	ELECT CHIP	10µF	20%	16V
C2832	1-128-013-11	ELECT CHIP	1µF	20%	50V
C2833	1-126-204-11	ELECT CHIP	47µF	20%	16V

<CONNECTOR>

CN2801	* 1-785-237-21	CONNECTOR, BOARD TO BOARD 28P	
CN2802	* 1-580-056-21	PIN, CONNECTOR (SMD) 3P	
CN2803	* 1-785-762-21	CONNECTOR, BOARD TO BOARD 18P	

<DIODE>

D2801	8-719-914-43	DIODE DAN202K
D2802	8-719-800-76	DIODE 1SS226
D2803	8-719-800-76	DIODE 1SS226
D2804	8-719-800-76	DIODE 1SS226
D2805	8-719-158-37	DIODE RD9.1SB2
D2806	8-719-800-76	DIODE 1SS226
D2807	8-719-914-43	DIODE DAN202K
D2808	8-719-800-76	DIODE 1SS226
D2809	8-719-914-43	DIODE DAN202K
D2810	8-719-800-76	DIODE 1SS226
D2811	8-719-800-76	DIODE 1SS226
D2812	8-719-800-76	DIODE 1SS226
D2813	8-719-800-76	DIODE 1SS226
D2814	8-719-800-76	DIODE 1SS226

<IC>

IC2801	8-759-542-11	IC MAX4223ESA-TG06
IC2802	8-759-542-11	IC MAX4223ESA-TG06
IC2803	8-759-542-11	IC MAX4223ESA-TG06
IC2805	8-759-090-19	IC SN75453BPS
IC2806	8-759-092-82	IC SN75157PS-ELL2000
IC2807	8-759-981-48	IC TL082M

<COIL>

L2801	1-412-058-11	INDUCTOR CHIP	10µH
L2802	1-412-058-11	INDUCTOR CHIP	10µH
L2803	1-412-058-11	INDUCTOR CHIP	10µH

<TRANSISTOR>

Q2801	8-729-900-53	TRANSISTOR DTC114EK
Q2802	8-729-230-49	TRANSISTOR 2SC2712-YG
Q2803	8-729-230-49	TRANSISTOR 2SC2712-YG
Q2804	8-729-216-22	TRANSISTOR 2SA1162-G
Q2805	8-729-230-49	TRANSISTOR 2SC2712-YG
Q2806	8-729-230-49	TRANSISTOR 2SC2712-YG
Q2807	8-729-216-22	TRANSISTOR 2SA1162-G
Q2808	8-729-900-53	TRANSISTOR DTC114EK
Q2809	8-729-900-53	TRANSISTOR DTC114EK

<RESISTOR>

R2801	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R2802	1-216-001-00	RES,CHIP	10	5%	1/10W
R2803	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R2804	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2805	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2806	1-216-295-91	SHORT	0		
R2807	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R2808	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R2809	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2810	1-216-001-00	RES,CHIP	10	5%	1/10W
R2811	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R2812	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2813	1-216-295-91	SHORT	0		
R2814	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R2815	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R2816	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2817	1-216-001-00	RES,CHIP	10	5%	1/10W
R2818	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R2819	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2820	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2821	1-216-295-91	SHORT	0		
R2822	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R2824	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2825	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2826	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2827	1-216-025-91	RES,CHIP	100	5%	1/10W
R2828	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2830	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2831	1-216-041-00	RES,CHIP	470	5%	1/10W
R2832	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2833	1-216-001-00	RES,CHIP	10	5%	1/10W
R2834	1-216-186-00	RES,CHIP	330	5%	1/8W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R2835	1-216-186-00	RES,CHIP	330	5%	1/8W
R2836	1-216-017-91	RES,CHIP	47	5%	1/10W
R2837	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2838	1-216-013-00	RES,CHIP	33	5%	1/10W
R2839	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2840	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2841	1-216-017-91	RES,CHIP	47	5%	1/10W
R2842	1-216-025-91	RES,CHIP	100	5%	1/10W
R2843	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2845	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2846	1-216-013-00	RES,CHIP	33	5%	1/10W
R2847	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2848	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2850	1-216-186-00	RES,CHIP	330	5%	1/8W
R2851	1-216-186-00	RES,CHIP	330	5%	1/8W

<RELAY>

RY2801	1-755-297-21	RELAY
RY2802	1-755-297-21	RELAY
RY2803	1-755-297-21	RELAY

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BB BOARD
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<CAPACITOR>

C3006	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3008	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3009	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3010	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3011	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3012	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3018	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3019	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3020	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3021	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3023	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3024	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3025	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3026	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3027	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3028	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C3029	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C3030	1-164-730-11	CERAMIC CHIP	0.0012MF	10%	50V
C3031	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3032	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3033	1-107-498-11	FILM	0.0022MF	2%	50V
C3034	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3035	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3036	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3044	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3046	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3047	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3049	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3051	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3052	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3053	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3054	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3056	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3057	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3059	1-107-498-11	FILM	0.0022MF	2%	50V
C3060	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3061	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3062	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3063	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3064	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3065	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3066	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3068	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3069	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3071	1-107-498-11	FILM	0.0022MF	2%	50V
C3072	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3073	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3074	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3075	1-126-204-21	ELECT	47MF		16V
C3076	1-126-204-21	ELECT	47MF		16V
C3077	1-126-204-21	ELECT	47MF		16V
C3078	1-115-156-11	CERAMIC CHIP	1MF		10V
C3079	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3080	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3081	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3084	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3086	1-115-156-11	CERAMIC CHIP	1MF		10V
C3087	1-115-156-11	CERAMIC CHIP	1MF		10V
C3088	1-115-156-11	CERAMIC CHIP	1MF		10V
C3089	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3090	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3091	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3092	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C3093	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V
C3094	1-126-204-21	ELECT	47MF		16V
C3095	1-126-204-21	ELECT	47MF		16V
C3096	1-126-204-21	ELECT	47MF		16V
C3098	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3099	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3100	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3101	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3103	1-115-156-11	CERAMIC CHIP	1MF		10V
C3104	1-115-156-11	CERAMIC CHIP	1MF		10V
C3105	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3106	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3107	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3109	1-126-204-21	ELECT	47MF		16V
C3110	1-126-204-21	ELECT	47MF		16V
C3114	1-115-156-11	CERAMIC CHIP	1MF		10V
C3115	1-115-156-11	CERAMIC CHIP	1MF		10V
C3116	1-115-156-11	CERAMIC CHIP	1MF		10V
C3117	1-115-156-11	CERAMIC CHIP	1MF		10V
C3118	1-115-156-11	CERAMIC CHIP	1MF		10V
C3119	1-115-156-11	CERAMIC CHIP	1MF		10V
C3121	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3122	1-164-156-11	CERAMIC CHIP	0.1MF		25V
C3123	1-115-156-11	CERAMIC CHIP	1MF		10V

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Rf.NO.	PART NO.	DESCRIPTION	REMARK
C3124	1-115-156-11	CERAMIC CHIP 1MF	10V
C3125	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3126	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3128	1-126-204-21	ELECT 1MF	16V
C3129	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3130	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3131	1-115-156-11	CERAMIC CHIP 1MF	10V
C3132	1-115-156-11	CERAMIC CHIP 1MF	10V
C3133	1-115-156-11	CERAMIC CHIP 1MF	10V
C3134	1-115-156-11	CERAMIC CHIP 1MF	10V
C3135	1-115-156-11	CERAMIC CHIP 1MF	10V
C3136	1-115-156-11	CERAMIC CHIP 1MF	10V
C3137	1-115-156-11	CERAMIC CHIP 1MF	10V
C3139	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3140	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3142	1-126-204-21	ELECT 1MF	16V
C3143	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3144	1-126-394-11	ELECT CHIP 10MF 20%	16V
C3145	1-126-394-11	ELECT CHIP 10MF 20%	16V
C3147	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3148	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3151	1-115-156-11	CERAMIC CHIP 1MF	10V
C3155	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3156	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3157	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3159	1-115-156-11	CERAMIC CHIP 1MF	10V
C3160	1-115-156-11	CERAMIC CHIP 1MF	10V
C3161	1-115-156-11	CERAMIC CHIP 1MF	10V
C3162	1-115-156-11	CERAMIC CHIP 1MF	10V
C3164	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3166	1-164-156-11	CERAMIC CHIP 0.1MF	25V
C3168	1-115-156-11	CERAMIC CHIP 1MF	10V
C3170	1-115-156-11	CERAMIC CHIP 1MF	10V
C3172	1-115-156-11	CERAMIC CHIP 1MF	10V
C3173	1-115-156-11	CERAMIC CHIP 1MF	10V
C3174	1-115-156-11	CERAMIC CHIP 1MF	10V
C3184	1-164-156-11	CERAMIC CHIP 0.1MF	25V
		<CONNECTOR>	
CN3001	1-760-388-11	PIN, CONNECTOR (SMD)9P	
CN3004	1-764-007-11	PIN, CONNECTOR (SMD)12P	
CN3005	1-573-806-21	PIN, CONNECTOR (1.5MM)(SMD)6P	
		<DIODE>	
D3001	8-719-988-62	DIODE 1SS355	
D3002	8-719-988-62	DIODE 1SS355	
D3003	8-719-988-62	DIODE 1SS355	
D3004	8-719-988-62	DIODE 1SS355	
D3005	8-719-988-62	DIODE 1SS355	
D3006	8-719-988-62	DIODE 1SS355	
D3007	8-719-988-62	DIODE 1SS355	
D3012	8-719-985-01	DIODE LM385M-1.2	
		<FILTER>	
FL3001	1-239-898-22	FILTER, EMI (SMD)	
FL3002	1-239-898-22	FILTER, EMI (SMD)	
FL3003	1-239-897-12	FILTER, EMI (SMD)	
FL3006	1-239-897-12	FILTER, EMI (SMD)	
FL3007	1-239-897-12	FILTER, EMI (SMD)	
FL3008	1-239-897-12	FILTER, EMI (SMD)	
FL3009	1-239-897-12	FILTER, EMI (SMD)	
FL3010	1-239-897-12	FILTER, EMI (SMD)	
FL3011		FILTER, EMI (SMD)	
FL3012		FILTER, EMI (SMD)	
FL3014		FILTER, EMI (SMD)	
FL3015		FILTER, EMI (SMD)	
FL3016		FILTER, EMI (SMD)	
FL3017		FILTER, EMI (SMD)	
FL3018		FILTER, EMI (SMD)	
FL3019		FILTER, EMI (SMD)	
FL3020		FILTER, EMI (SMD)	
FL3021		FILTER, EMI (SMD)	
		<IC>	
IC3003	8-759-473-74	IC SN74CBTD3306PW-E20	
IC3004	8-759-482-35	IC MC100ELT20DR2	
IC3005	8-759-524-50	IC TC74VHC541FT (EL)	
IC3006	8-759-490-41	IC TC74VHCT541AFT (EL)	
IC3007	8-759-464-43	IC CDC339NS	
IC3009	8-759-369-85	IC BT121KPJ80	
IC3011	8-752-086-22	IC CXA31060-T6	
IC3014	8-759-546-24	IC SN74ALVCH162270TE	
IC3017	8-752-071-69	IC CXA3026Q	
IC3018	8-759-183-52	IC TL431CPK-E1	
IC3020	8-752-071-69	IC CXA3026Q	
IC3021	8-759-183-52	IC TL431CPK-E1	
IC3022	8-759-546-24	IC SN74ALVCH162270TE	
IC3026	8-759-549-39	IC IP00C901	
IC3028	8-752-071-69	IC CXA3026Q	
IC3029	8-759-183-52	IC TL431CPK-E1	
IC3031	8-759-183-52	IC TL431CPK-E1	
IC3032	8-759-531-34	IC MB81G83222-010PQ-A	
IC3033	8-759-546-23	IC IP00C702	
IC3037	8-759-531-34	IC MB81G83222-010PQ-A	
IC3038	8-759-546-23	IC IP00C702	
IC3039	8-759-531-34	IC MB81G83222-010PQ-A	
IC3040	8-759-546-23	IC IP00C702	
IC3041	8-759-510-71	IC BA10358F-E2	
IC3042	8-759-475-39	IC TC74LCX74FT (EL)	
IC3045	8-759-549-98	IC TC7SH14FU	
IC3046	8-759-475-29	IC TC74LCX574F (EL)	
IC3047	8-759-475-29	IC TC74LCX574F (EL)	
		<RESISTOR>	
R3001	1-216-815-11	RES, CHIP 330 5%	1/16W
R3005	1-216-801-11	RES, CHIP 22 5%	1/16W
R3006	1-216-815-11	RES, CHIP 330 5%	1/16W
R3008	1-216-815-11	RES, CHIP 330 5%	1/16W
R3010	1-216-815-11	RES, CHIP 330 5%	1/16W
R3012	1-216-815-11	RES, CHIP 330 5%	1/16W
R3014	1-216-815-11	RES, CHIP 330 5%	1/16W
R3017	1-218-697-11	METAL CHIP 1.6K 0.50%	1/16W
R3018	1-216-663-11	METAL CHIP 3.3K 0.50%	1/10W

Rf.NO.	PART NO.	DESCRIPTION		REMARK
R3019	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3020	1-216-801-11	RES, CHIP	22 5% 1/16W	
R3022	1-216-648-11	METAL CHIP	750 0.50% 1/10W	
R3023	1-216-648-11	METAL CHIP	750 0.50% 1/10W	
R3024	1-216-624-11	METAL CHIP	75 0.50% 1/10W	
R3026	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3028	1-216-648-11	METAL CHIP	750 0.50% 1/10W	
R3029	1-216-648-11	METAL CHIP	750 0.50% 1/10W	
R3030	1-216-624-11	METAL CHIP	75 0.50% 1/10W	
R3032	1-216-801-11	RES, CHIP	22 5% 1/16W	
R3036	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3038	1-216-648-11	METAL CHIP	750 0.50% 1/10W	
R3039	1-216-648-11	METAL CHIP	750 0.50% 1/10W	
R3040	1-216-624-11	METAL CHIP	75 0.50% 1/10W	
R3043	1-216-801-11	RES, CHIP	22 5% 1/16W	
R3044	1-220-242-11	RES, CHIP	22 5% 1/4W	
R3045	1-218-707-11	METAL CHIP	4.3K 0.50% 1/16W	
R3046	1-216-651-11	METAL CHIP	1K 0.50% 1/16W	
R3047	1-216-801-11	RES, CHIP	22 5% 1/16W	
R3048	1-216-821-11	RES, CHIP	1K 5% 1/16W	
R3049	1-216-821-11	RES, CHIP	1K 5% 1/16W	
R3052	1-216-624-11	METAL CHIP	75 0.50% 1/10W	
R3053	1-216-624-11	METAL CHIP	75 0.50% 1/10W	
R3054	1-216-624-11	METAL CHIP	75 0.50% 1/10W	
R3055	1-216-821-11	RES, CHIP	1K 5% 1/16W	
R3056	1-218-648-11	METAL, CHIP	15 0.50% 1/16W	
R3061	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3062	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3063	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3064	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3065	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3066	1-216-801-11	RES, CHIP	22 5% 1/16W	
R3067	1-216-821-11	RES, CHIP	1K 5% 1/16W	
R3068	1-216-845-11	RES, CHIP	100K 5% 1/16W	
R3069	1-216-809-11	RES, CHIP	100 5% 1/16W	
R3070	1-216-829-11	RES, CHIP	4.7K 5% 1/16W	
R3076	1-216-829-11	RES, CHIP	4.7K 5% 1/16W	
R3080	1-216-829-11	RES, CHIP	4.7K 5% 1/16W	
R3082	1-216-833-11	RES, CHIP	10K 5% 1/16W	
R3085	1-216-833-11	RES, CHIP	10K 5% 1/16W	
R3086	1-216-833-11	RES, CHIP	10K 5% 1/16W	
R3087	1-216-833-11	RES, CHIP	10K 5% 1/16W	
R3093	1-216-821-11	RES, CHIP	1K 5% 1/16W	
R3108	1-216-809-11	RES, CHIP	100 5% 1/16W	
R3109	1-218-700-11	METAL CHIP	2.2K 0.50% 1/16W	
R3110	1-218-699-11	METAL CHIP	2K 0.05% 1/16W	
R3113	1-218-692-11	METAL CHIP	1K 0.05% 1/16W	
R3114	1-216-825-11	RES, CHIP	2.2K 5% 1/16W	
R3115	1-216-021-00	RES, CHIP	68 5% 1/10W	
R3116	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3117	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3122	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3123	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3124	1-216-809-11	RES, CHIP	100 5% 1/16W	
R3126	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3130	1-216-833-11	RES, CHIP	10K 5% 1/16W	
R3133	1-216-017-91	RES, CHIP	47 5% 1/10W	
R3134	1-216-295-91	CONDUCTOR, CHIP	0	
R3135	1-216-295-91	CONDUCTOR, CHIP	0	
R3136	1-216-295-91	CONDUCTOR, CHIP	0	
R3138	1-216-864-11	CONDUCTOR, CHIP	0	
R3139	1-216-864-11	CONDUCTOR, CHIP	0	
R3143	1-216-864-11	CONDUCTOR, CHIP	0	
R3144	1-216-864-11	CONDUCTOR, CHIP	0	
R3146	1-216-864-11	CONDUCTOR, CHIP	0	
R3147	1-216-864-11	CONDUCTOR, CHIP	0	
R3151	1-216-864-11	CONDUCTOR, CHIP	0	
R3156	1-216-864-11	CONDUCTOR, CHIP	0	
R3158	1-219-570-11	RES, CHIP	10M 5% 1/16W	
R3159	1-219-570-11	RES, CHIP	10M 5% 1/16W	
R3160	1-219-570-11	RES, CHIP	10M 5% 1/16W	
R3166	1-216-864-11	CONDUCTOR, CHIP	0	
		<RESISTOR BLOCK>		
RA3005	1-233-576-11	RES, CHIP NETWORK	100	
RA3006	1-233-576-11	RES, CHIP NETWORK	100	
RA3009	1-233-576-11	RES, CHIP NETWORK	100	
RA3010	1-233-576-11	RES, CHIP NETWORK	100	
RA3011	1-233-576-11	RES, CHIP NETWORK	100	
RA3012	1-233-576-11	RES, CHIP NETWORK	100	
RA3019	1-233-415-21	RES, CHIP NETWORK	10K	
RA3020	1-233-415-21	RES, CHIP NETWORK	10K	
RA3021	1-233-576-11	RES, CHIP NETWORK	100	
RA3022	1-233-576-11	RES, CHIP NETWORK	100	
RA3023	1-233-576-11	RES, CHIP NETWORK	100	
RA3024	1-233-576-11	RES, CHIP NETWORK	100	
RA3033	1-233-576-11	RES, CHIP NETWORK	100	
RA3034	1-233-576-11	RES, CHIP NETWORK	100	
RA3035	1-233-576-11	RES, CHIP NETWORK	100	
RA3040	1-233-576-11	RES, CHIP NETWORK	100	
RA3041	1-233-415-21	RES, CHIP NETWORK	10K	
RA3042	1-233-415-21	RES, CHIP NETWORK	10K	
RA3043	1-233-415-21	RES, CHIP NETWORK	10K	
RA3044	1-233-415-21	RES, CHIP NETWORK	10K	
RA3045	1-233-415-21	RES, CHIP NETWORK	10K	
RA3046	1-233-415-21	RES, CHIP NETWORK	10K	
		**********		
		* A-1335-114-A C COMPL		
		**********		
		<CAPACITOR>		
C5001	1-164-156-11	CERAMIC CHIP	0.1µF 25V	
C5002	1-164-156-11	CERAMIC CHIP	0.1µF 25V	
C5003	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V	
C5004	1-126-204-11	ELECT CHIP	47µF 20% 16V	
C5005	1-117-681-11	ELECT CHIP	100µF 20% 16V	
C5006	1-126-204-11	ELECT CHIP	47µF 20% 16V	
C5007	1-164-156-11	CERAMIC CHIP	0.1µF 25V	
C5008	1-128-400-11	ELECT CHIP	47µF 20% 25V	
C5009	1-128-400-11	ELECT CHIP	47µF 20% 25V	
C5010	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V	
C5011	1-164-156-11	CERAMIC CHIP	0.1µF 25V	
C5012	1-126-204-11	ELECT CHIP	47µF 20% 16V	

Rf.NO.	PART NO.	DESCRIPTION			REMARK
C5013	1-128-400-11	ELECT CHIP	47µF	20%	25V
C5014	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5015	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5016	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5017	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5018	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5019	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5020	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5021	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5022	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C5023	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C5024	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5027	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5028	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5029	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5031	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5032	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5033	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5034	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5035	1-128-400-11	ELECT CHIP	47µF	20%	25V
C5037	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5038	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5101	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5102	1-115-156-11	CERAMIC CHIP	1µF		10V
C5103	1-115-156-11	CERAMIC CHIP	1µF		10V
C5104	1-115-156-11	CERAMIC CHIP	1µF		10V
C5105	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5106	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C5108	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5109	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5110	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5111	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5112	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5113	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5114	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5115	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5116	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5117	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5118	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5119	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5121	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5122	1-115-156-11	CERAMIC CHIP	1µF		10V
C5123	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5124	1-109-994-11	CERAMIC CHIP	2.2µF	10%	10V
C5125	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5126	1-109-994-11	CERAMIC CHIP	2.2µF	10%	10V
C5127	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5128	1-109-994-11	CERAMIC CHIP	2.2µF	10%	10V
C5129	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5130	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5131	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5132	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5133	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5134	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5135	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5137	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5138	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5139	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5140	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5141	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5142	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5143	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5144	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5145	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5147	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C5149	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5150	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5151	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5152	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C5217	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5218	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5220	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5221	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5222	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5223	1-128-400-11	ELECT CHIP	47µF	20%	25V
C5226	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5227	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5228	1-117-681-11	ELECT CHIP	100µF	20%	16V
C5229	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5238	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5239	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5240	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5241	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5242	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5243	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5244	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C5245	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C5246	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5247	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C5301	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5302	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5304	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5305	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5306	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5307	1-128-400-11	ELECT CHIP	47µF	20%	25V
C5310	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5311	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5312	1-117-681-11	ELECT CHIP	100µF	20%	16V
C5313	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5317	1-126-204-11	ELECT CHIP	47µF	20%	16V
C5318	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5320	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5321	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5322	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5323	1-128-400-11	ELECT CHIP	47µF	20%	25V
C5326	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5327	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5328	1-117-681-11	ELECT CHIP	100µF	20%	16V
C5329	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5330	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5331	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5332	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C5333	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C5334	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C5335	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C5336	1-164-156-11	CERAMIC CHIP	0.1µF		25V

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Rf.NO.	PART NO.	DESCRIPTION	REMARK
C5337	1-164-005-11	CERAMIC CHIP 0.47µF	25V
C5401	1-162-970-11	CERAMIC CHIP 0.01µF 10%	25V
C5402	1-164-156-11	CERAMIC CHIP 0.1µF	25V
C5403	1-164-156-11	CERAMIC CHIP 0.1µF	25V
C5404	1-164-156-11	CERAMIC CHIP 0.1µF	25V
C5405	1-164-156-11	CERAMIC CHIP 0.1µF	25V
C5406	1-164-156-11	CERAMIC CHIP 0.1µF	25V
C5407	1-164-156-11	CERAMIC CHIP 0.1µF	25V
C5408	1-164-156-11	CERAMIC CHIP 0.1µF	25V
C5642	1-119-667-11	CERAMIC CHIP 22µF	10V
C5643	1-164-156-11	CERAMIC CHIP 0.1µF	25V
C5644	1-162-923-11	CERAMIC CHIP 47PF 5%	50V
C5645	1-162-966-11	CERAMIC CHIP 0.0022µF 10%	50V
C5646	1-162-966-11	CERAMIC CHIP 0.0022µF 10%	50V
C5648	1-115-156-11	CERAMIC CHIP 1µF	10V
C5649	1-115-156-11	CERAMIC CHIP 1µF	10V
C5650	1-115-156-11	CERAMIC CHIP 1µF	10V
C5651	1-115-156-11	CERAMIC CHIP 1µF	10V
C5670	1-164-156-11	CERAMIC CHIP 0.1µF	25V

<CONNECTOR>

CN5001	* 1-580-057-11	PIN, CONNECTOR 4P	
CN5002	* 1-764-007-11	PIN, CONNECTOR (SMD) 12P	
CN5003	* 1-764-177-11	PIN, CONNECTOR (SMD)(1.5MM) 7P	
CN5006	* 1-580-056-21	PIN, CONNECTOR 3P	
CN5007	* 1-764-643-21	PIN, CONNECTOR (SMD) 11P	
CN5008	* 1-569-481-11	CONNECTOR, FPC 30P	
CN5009	* 1-580-055-21	PIN, CONNECTOR 2P	
CN5010	* 1-573-768-21	PIN, CONNECTOR (1.5MM) (SMD)5P	
CN5012	* 1-580-056-21	PIN, CONNECTOR (SMD) 3P	
CN5020	* 1-764-007-11	PIN, CONNECTOR (SMD) 12P	
CN5021	* 1-691-591-11	PIN, CONNECTOR (1.5MM) (SMD)8P	
CN5022	* 1-569-775-21	PIN, CONNECTOR 5P	
CN5023	* 1-691-591-11	PIN, CONNECTOR (1.5MM) (SMD)8P	
CN5101	* 1-760-388-11	CONNECTOR PIN (SMD) 9 PIN	
CN5202	* 1-784-277-21	CONNECTOR, FFC/FPC 32P	
CN5303	* 1-784-277-21	CONNECTOR, FFC/FPC 32P	
CN5304	* 1-784-277-21	CONNECTOR, FFC/FPC 32P	
CN5401	* 1-691-551-11	PIN, CONNECTOR (SMD) 8P	

<DIODE>

D5001	8-719-159-10	DIODE RD5.1SB-T2
D5002	8-719-159-10	DIODE RD5.1SB-T2
D5003	8-719-037-24	DIODE RD12SB3-T1
D5004	8-719-037-24	DIODE RD12SB3-T1
D5005	8-719-033-53	DIODE RD6.8SB2-T1
D5006	8-719-988-61	DIODE 1SS355TE-17
D5007	8-719-159-10	DIODE RD5.1SB-T2
D5008	8-719-159-10	DIODE RD5.1SB-T2
D5009	8-719-914-44	DIODE DAP202K
D5010	8-719-045-55	DIODE SEC1201C
D5011	8-719-045-55	DIODE SEC1201C
D5101	8-719-031-68	DIODE HVU359TRF

<FERRITE BEAD>

Rf.NO.	PART NO.	DESCRIPTION	REMARK
FB5030	1-414-227-11	INDUCTOR CHIP	0µH
FB5031	1-414-760-21	INDUCTOR CHIP	0µH
FB5032	1-414-760-21	INDUCTOR CHIP	0µH
FB5102	1-414-760-21	INDUCTOR CHIP	0µH
FB5227	1-414-227-11	INDUCTOR CHIP	0µH
FB5235	1-414-760-21	INDUCTOR CHIP	0µH
FB5353	1-414-227-11	INDUCTOR CHIP	0µH
FB5354	1-414-227-11	INDUCTOR CHIP	0µH
FB5362	1-414-760-21	INDUCTOR CHIP	0µH
FB5382	1-414-760-21	INDUCTOR CHIP	0µH
FB5401	1-414-760-21	INDUCTOR CHIP	0µH
FB5402	1-414-760-21	INDUCTOR CHIP	0µH
FB5600	1-414-760-21	INDUCTOR CHIP	0µH
FB5601	1-414-760-21	INDUCTOR CHIP	0µH
FB5602	1-414-760-21	INDUCTOR CHIP	0µH

<FILTER>

FL5002	1-239-466-21	FILTER, EMI
FL5003	1-239-466-21	FILTER, EMI
FL5004	1-239-466-21	FILTER, EMI
FL5005	1-239-466-21	FILTER, EMI
FL5010	1-239-400-11	FILTER, CHIP EMI
FL5021	1-233-910-21	FILTER, EMI
FL5101	1-239-466-21	FILTER, EMI

<IC>

IC5001	8-759-523-79	IC TC74VHC02FT(EL)
IC5002	8-759-259-77	IC PQ20VZ5U
IC5003	8-759-082-58	IC TC7W08FU
IC5004	8-759-351-63	IC TA7812F(TE16L)
IC5006	8-759-162-80	IC MM1170BFB
IC5007	8-759-471-25	IC BR24CF16F
IC5008	8-759-239-92	IC TC74HC07AF
IC5009	8-759-471-25	IC BR24CF16F
IC5011	8-759-524-50	IC TC74VHC541FT(EL)
IC5012	8-759-082-58	IC TC7W08FU
IC5013	8-759-157-17	IC PQ05SZ1U
IC5014	8-759-439-67	IC TC7W126FU(TE12R)
IC5015	8-759-082-58	IC TC7W08FU
IC5016	8-759-058-58	IC TC7S04FU(TE85R)
IC5017	8-759-259-77	IC PQ20VZ5U
IC5101	8-759-066-55	IC TA75W393FU
IC5102	8-759-523-03	IC TC74HC4066AFT(EL)
IC5103	8-759-572-46	IC MB90096PF-G-159-BND-ER
IC5104	8-759-490-57	IC M52337SP
IC5105	8-759-290-12	IC M62370GP-650D
IC5106	8-752-080-98	IC CXA2111R
IC5107	8-759-523-81	IC TC74VHC08FT(EL)
IC5108	8-759-491-46	IC TC74VHCT04AFT(EL)
IC5109	8-759-523-03	IC TC74HC4066AFT(EL)
IC5110	8-759-066-55	IC TA75W393FU
IC5210	8-752-080-99	IC CXA2112R
IC5211	8-752-080-99	IC CXA2112R
IC5212	8-759-482-47	IC M62399FP-TE2
IC5301	8-752-080-99	IC CXA2112R
IC5302	8-752-080-99	IC CXA2112R

Rf.NO.	PART NO.	DESCRIPTION			REMARK
IC5304	8-752-080-99	IC CXA2112R			
IC5305	8-752-080-99	IC CXA2112R			
IC5401	* 8-759-571-09	IC ISPLSI1016E-80LT44-SX1658			
IC5402	8-759-491-46	IC TC74VHCT04AFT(EL)			
IC5403	8-759-491-46	IC TC74VHCT04AFT(EL)			
IC5404	8-759-363-18	IC TC7ST04FU(TE85R)			
IC5405	8-759-447-77	IC TC7WH74FU(TE12R)			
IC5406	8-759-577-21	IC MC100ELT21DR2			
		<COIL>			
L5101	1-410-377-31	INDUCTOR CHIP	4.7µH		
L5201	1-410-369-11	INDUCTOR CHIP	1µH		
L5202	1-410-369-11	INDUCTOR CHIP	1µH		
L5301	1-410-369-11	INDUCTOR CHIP	1µH		
L5302	1-410-369-11	INDUCTOR CHIP	1µH		
L5303	1-410-369-11	INDUCTOR CHIP	1µH		
L5304	1-410-369-11	INDUCTOR CHIP	1µH		
		<TRANSISTOR>			
Q5001	8-729-900-53	TRANSISTOR DTC114EK			
Q5002	8-729-101-07	TRANSISTOR 2SB798-DL			
Q5003	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5101	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5102	8-729-216-22	TRANSISTOR 2SA1162-G			
Q5103	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5105	8-729-013-28	TRANSISTOR HN1B01FU-TE85R			
Q5203	8-729-013-28	TRANSISTOR HN1B01FU-TE85R			
Q5205	8-729-013-28	TRANSISTOR HN1B01FU-TE85R			
Q5207	8-729-013-28	TRANSISTOR HN1B01FU-TE85R			
Q5209	8-729-013-28	TRANSISTOR HN1B01FU-TE85R			
Q5211	8-729-013-28	TRANSISTOR HN1B01FU-TE85R			
Q5213	8-729-013-28	TRANSISTOR HN1B01FU-TE85R			
		<RESISTOR>			
R5001	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5002	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5003	1-216-809-11	RES,CHIP	100	5%	1/16W
R5004	1-216-809-11	RES,CHIP	100	5%	1/16W
R5005	1-216-841-11	RES,CHIP	47K	5%	1/16W
R5006	1-216-809-11	RES,CHIP	100	5%	1/16W
R5007	1-216-841-11	RES,CHIP	47K	5%	1/16W
R5008	1-216-809-11	RES,CHIP	100	5%	1/16W
R5009	1-216-809-11	RES,CHIP	100	5%	1/16W
R5010	1-216-809-11	RES,CHIP	100	5%	1/16W
R5011	1-216-809-11	RES,CHIP	100	5%	1/16W
R5012	1-216-809-11	RES,CHIP	100	5%	1/16W
R5013	1-216-809-11	RES,CHIP	100	5%	1/16W
R5014	1-216-809-11	RES,CHIP	100	5%	1/16W
R5015	1-216-809-11	RES,CHIP	100	5%	1/16W
R5017	1-216-809-11	RES,CHIP	100	5%	1/16W
R5018	1-216-809-11	RES,CHIP	100	5%	1/16W
R5019	1-216-809-11	RES,CHIP	100	5%	1/16W
R5020	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5021	1-216-829-11	RES,CHIP	4.7K	5%	1/16W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5022	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5023	1-216-809-11	RES,CHIP	100	5%	1/16W
R5024	1-216-809-11	RES,CHIP	100	5%	1/16W
R5025	1-216-809-11	RES,CHIP	100	5%	1/16W
R5026	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5027	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5028	1-216-809-11	RES,CHIP	100	5%	1/16W
R5029	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5030	1-218-723-91	METAL CHIP	20K	0.50%	1/16W
R5031	1-216-809-11	RES,CHIP	100	5%	1/16W
R5032	1-218-685-11	METAL CHIP	510	0.50%	1/16W
R5033	1-218-714-11	METAL CHIP	8.2K	0.50%	1/16W
R5034	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5035	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5036	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5037	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5038	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5039	1-216-809-11	RES,CHIP	100	5%	1/16W
R5040	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5041	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5042	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5043	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5044	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5045	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5046	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5048	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5049	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5050	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5051	1-216-809-11	RES,CHIP	100	5%	1/16W
R5052	1-216-809-11	RES,CHIP	100	5%	1/16W
R5053	1-216-809-11	RES,CHIP	100	5%	1/16W
R5054	1-216-809-11	RES,CHIP	100	5%	1/16W
R5055	1-216-809-11	RES,CHIP	100	5%	1/16W
R5056	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5057	1-216-809-11	RES,CHIP	100	5%	1/16W
R5058	1-216-809-11	RES,CHIP	100	5%	1/16W
R5060	1-216-809-11	RES,CHIP	100	5%	1/16W
R5061	1-216-809-11	RES,CHIP	100	5%	1/16W
R5062	1-216-809-11	RES,CHIP	100	5%	1/16W
R5063	1-216-809-11	RES,CHIP	100	5%	1/16W
R5064	1-216-809-11	RES,CHIP	100	5%	1/16W
R5065	1-216-809-11	RES,CHIP	100	5%	1/16W
R5066	1-216-809-11	RES,CHIP	100	5%	1/16W
R5067	1-216-809-11	RES,CHIP	100	5%	1/16W
R5068	1-216-809-11	RES,CHIP	100	5%	1/16W
R5069	1-216-809-11	RES,CHIP	100	5%	1/16W
R5070	1-216-864-11	SHORT	0		
R5071	1-216-864-11	SHORT	0		
R5072	1-216-864-11	SHORT	0		
R5073	1-216-864-11	SHORT	0		
R5077	1-216-864-11	SHORT	0		
R5078	1-216-864-11	SHORT	0		
R5079	1-216-815-11	RES,CHIP	330	5%	1/16W
R5080	1-216-815-11	RES,CHIP	330	5%	1/16W
R5081	1-216-815-11	RES,CHIP	330	5%	1/16W
R5082	1-216-815-11	RES,CHIP	330	5%	1/16W
R5083	1-216-815-11	RES,CHIP	330	5%	1/16W
R5084	1-216-821-11	RES,CHIP	1K	5%	1/16W

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Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5085	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5086	1-216-841-11	RES,CHIP	47K	5%	1/16W
R5087	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5088	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5089	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5090	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5094	1-216-809-11	RES,CHIP	100	5%	1/16W
R5095	1-216-809-11	RES,CHIP	100	5%	1/16W
R5096	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5097	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5098	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5099	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5100	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5101	1-216-845-11	RES,CHIP	100K	5%	1/16W
R5104	1-216-841-11	RES,CHIP	47K	5%	1/16W
R5105	1-216-805-11	RES,CHIP	47	5%	1/16W
R5117	1-216-864-11	SHORT	0		
R5118	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5119	1-216-818-11	RES,CHIP	560	5%	1/16W
R5130	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5131	1-216-801-11	RES,CHIP	22	5%	1/16W
R5132	1-216-864-11	SHORT	0		
R5133	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5134	1-216-801-11	RES,CHIP	22	5%	1/16W
R5135	1-216-864-11	SHORT	0		
R5136	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R5137	1-216-801-11	RES,CHIP	22	5%	1/16W
R5138	1-216-864-11	SHORT	0		
R5139	1-216-809-11	RES,CHIP	100	5%	1/16W
R5140	1-216-817-11	RES,CHIP	470	5%	1/16W
R5142	1-216-805-11	RES,CHIP	47	5%	1/16W
R5143	1-216-805-11	RES,CHIP	47	5%	1/16W
R5144	1-216-805-11	RES,CHIP	47	5%	1/16W
R5145	1-216-819-11	RES,CHIP	680	5%	1/16W
R5146	1-216-819-11	RES,CHIP	680	5%	1/16W
R5147	1-216-819-11	RES,CHIP	680	5%	1/16W
R5148	1-216-805-11	RES,CHIP	47	5%	1/16W
R5149	1-216-809-11	RES,CHIP	100	5%	1/16W
R5150	1-216-801-11	RES,CHIP	22	5%	1/16W
R5151	1-216-801-11	RES,CHIP	22	5%	1/16W
R5152	1-216-801-11	RES,CHIP	22	5%	1/16W
R5153	1-216-809-11	RES,CHIP	100	5%	1/16W
R5154	1-216-809-11	RES,CHIP	100	5%	1/16W
R5155	1-216-809-11	RES,CHIP	100	5%	1/16W
R5159	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5160	1-216-801-11	RES,CHIP	22	5%	1/16W
R5161	1-216-801-11	RES,CHIP	22	5%	1/16W
R5162	1-216-801-11	RES,CHIP	22	5%	1/16W
R5164	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5167	1-216-809-11	RES,CHIP	100	5%	1/16W
R5168	1-216-809-11	RES,CHIP	100	5%	1/16W
R5171	1-216-809-11	RES,CHIP	100	5%	1/16W
R5173	1-216-809-11	RES,CHIP	100	5%	1/16W
R5181	1-218-723-91	METAL CHIP	20K	0.50%	1/16W
R5182	1-216-809-11	RES,CHIP	100	5%	1/16W
R5183	1-216-809-11	RES,CHIP	100	5%	1/16W
R5184	1-216-809-11	RES,CHIP	100	5%	1/16W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5185	1-218-734-11	METAL CHIP	56K	0.50%	1/16W
R5194	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R5198	1-216-809-11	RES,CHIP	100	5%	1/16W
R5199	1-216-809-11	RES,CHIP	100	5%	1/16W
R5206	1-216-809-11	RES,CHIP	100	5%	1/16W
R5207	1-216-809-11	RES,CHIP	100	5%	1/16W
R5208	1-216-809-11	RES,CHIP	100	5%	1/16W
R5210	1-216-809-11	RES,CHIP	100	5%	1/16W
R5222	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5224	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5226	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5230	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5232	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5234	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5238	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R5239	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R5242	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R5243	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R5246	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R5247	1-216-789-11	RES,CHIP	2.2	5%	1/16W
R5249	1-216-864-11	SHORT	0		
R5251	1-216-864-11	SHORT	0		
R5253	1-216-864-11	SHORT	0		
R5254	1-216-845-11	RES,CHIP	100K	5%	1/16W
R5256	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5258	1-216-845-11	RES,CHIP	100K	5%	1/16W
R5260	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R5261	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R5262	1-216-805-11	RES,CHIP	47	5%	1/16W
R5263	1-216-805-11	RES,CHIP	47	5%	1/16W
R5264	1-216-805-11	RES,CHIP	47	5%	1/16W
R5265	1-216-805-11	RES,CHIP	47	5%	1/16W
R5266	1-216-805-11	RES,CHIP	47	5%	1/16W
R5267	1-216-805-11	RES,CHIP	47	5%	1/16W
R5268	1-216-805-11	RES,CHIP	47	5%	1/16W
R5269	1-216-805-11	RES,CHIP	47	5%	1/16W
R5270	1-216-805-11	RES,CHIP	47	5%	1/16W
R5271	1-216-805-11	RES,CHIP	47	5%	1/16W
R5272	1-216-805-11	RES,CHIP	47	5%	1/16W
R5273	1-216-805-11	RES,CHIP	47	5%	1/16W
R5274	1-216-864-11	SHORT	0		
R5275	1-216-809-11	RES,CHIP	100	5%	1/16W
R5276	1-216-809-11	RES,CHIP	100	5%	1/16W
R5277	1-216-809-11	RES,CHIP	100	5%	1/16W
R5278	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5279	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5280	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5281	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5282	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5283	1-216-864-11	SHORT	0		
R5284	1-216-864-11	SHORT	0		
R5285	1-216-864-11	SHORT	0		
R5286	1-216-864-11	SHORT	0		
R5301	1-216-845-11	RES,CHIP	100K	5%	1/16W
R5302	1-216-809-11	RES,CHIP	100	5%	1/16W
R5303	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5304	1-216-809-11	RES,CHIP	100	5%	1/16W
R5305	1-216-845-11	RES,CHIP	100K	5%	1/16W
R5307	1-218-726-11	METAL CHIP	27K	0.50%	1/16W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5308	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R5309	1-216-805-11	RES,CHIP	47	5%	1/16W
R5310	1-216-805-11	RES,CHIP	47	5%	1/16W
R5311	1-216-805-11	RES,CHIP	47	5%	1/16W
R5312	1-216-805-11	RES,CHIP	47	5%	1/16W
R5313	1-216-805-11	RES,CHIP	47	5%	1/16W
R5314	1-216-805-11	RES,CHIP	47	5%	1/16W
R5315	1-216-805-11	RES,CHIP	47	5%	1/16W
R5316	1-216-805-11	RES,CHIP	47	5%	1/16W
R5317	1-216-805-11	RES,CHIP	47	5%	1/16W
R5318	1-216-805-11	RES,CHIP	47	5%	1/16W
R5319	1-216-805-11	RES,CHIP	47	5%	1/16W
R5320	1-216-805-11	RES,CHIP	47	5%	1/16W
R5321	1-216-864-11	SHORT	0		
R5324	1-216-845-11	RES,CHIP	100K	5%	1/16W
R5326	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5328	1-216-845-11	RES,CHIP	100K	5%	1/16W
R5330	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R5331	1-218-726-11	METAL CHIP	27K	0.50%	1/16W
R5332	1-216-805-11	RES,CHIP	47	5%	1/16W
R5333	1-216-805-11	RES,CHIP	47	5%	1/16W
R5334	1-216-805-11	RES,CHIP	47	5%	1/16W
R5335	1-216-805-11	RES,CHIP	47	5%	1/16W
R5336	1-216-805-11	RES,CHIP	47	5%	1/16W
R5337	1-216-805-11	RES,CHIP	47	5%	1/16W
R5338	1-216-805-11	RES,CHIP	47	5%	1/16W
R5339	1-216-805-11	RES,CHIP	47	5%	1/16W
R5340	1-216-805-11	RES,CHIP	47	5%	1/16W
R5341	1-216-805-11	RES,CHIP	47	5%	1/16W
R5342	1-216-805-11	RES,CHIP	47	5%	1/16W
R5343	1-216-805-11	RES,CHIP	47	5%	1/16W
R5344	1-216-864-11	SHORT	0		
R5347	1-216-815-11	RES,CHIP	330	5%	1/16W
R5348	1-216-815-11	RES,CHIP	330	5%	1/16W
R5352	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5353	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5354	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5355	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5356	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5357	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5362	1-216-864-11	SHORT	0		
R5363	1-216-864-11	SHORT	0		
R5401	1-216-809-11	RES,CHIP	100	5%	1/16W
R5403	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5404	1-216-805-11	RES,CHIP	47	5%	1/16W
R5405	1-216-805-11	RES,CHIP	47	5%	1/16W
R5406	1-216-809-11	RES,CHIP	100	5%	1/16W
R5407	1-216-809-11	RES,CHIP	100	5%	1/16W
R5408	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5409	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5410	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5411	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5412	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5413	1-216-805-11	RES,CHIP	47	5%	1/16W
R5414	1-216-805-11	RES,CHIP	47	5%	1/16W
R5415	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5416	1-216-805-11	RES,CHIP	47	5%	1/16W
R5417	1-216-805-11	RES,CHIP	47	5%	1/16W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5418	1-216-809-11	RES,CHIP	100	5%	1/16W
R5419	1-216-805-11	RES,CHIP	47	5%	1/16W
R5420	1-216-805-11	RES,CHIP	47	5%	1/16W
R5421	1-216-805-11	RES,CHIP	47	5%	1/16W
R5422	1-216-805-11	RES,CHIP	47	5%	1/16W
R5424	1-216-805-11	RES,CHIP	47	5%	1/16W
R5427	1-216-805-11	RES,CHIP	47	5%	1/16W
R5428	1-216-805-11	RES,CHIP	47	5%	1/16W
R5430	1-216-805-11	RES,CHIP	47	5%	1/16W
R5432	1-216-809-11	RES,CHIP	100	5%	1/16W
R5433	1-216-805-11	RES,CHIP	47	5%	1/16W
R5434	1-216-805-11	RES,CHIP	47	5%	1/16W
R5437	1-216-805-11	RES,CHIP	47	5%	1/16W
R5438	1-216-805-11	RES,CHIP	47	5%	1/16W
R5439	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5440	1-216-805-11	RES,CHIP	47	5%	1/16W
R5441	1-216-809-11	RES,CHIP	100	5%	1/16W
R5442	1-216-805-11	RES,CHIP	47	5%	1/16W
R5443	1-216-809-11	RES,CHIP	100	5%	1/16W
R5444	1-216-809-11	RES,CHIP	100	5%	1/16W
R5445	1-216-809-11	RES,CHIP	100	5%	1/16W
R5446	1-216-809-11	RES,CHIP	100	5%	1/16W
R5447	1-216-809-11	RES,CHIP	100	5%	1/16W
R5448	1-216-809-11	RES,CHIP	100	5%	1/16W
R5449	1-216-805-11	RES,CHIP	47	5%	1/16W
R5450	1-216-805-11	RES,CHIP	47	5%	1/16W
R5451	1-216-809-11	RES,CHIP	100	5%	1/16W
R5452	1-216-809-11	RES,CHIP	100	5%	1/16W
R5453	1-216-809-11	RES,CHIP	100	5%	1/16W
R5455	1-216-805-11	RES,CHIP	47	5%	1/16W
R5456	1-216-805-11	RES,CHIP	47	5%	1/16W
R5457	1-216-810-11	RES,CHIP	120	5%	1/16W
R5501	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5502	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5503	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5504	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R5505	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R5506	1-218-685-11	METAL CHIP	510	0.50%	1/16W
R5507	1-216-809-11	RES,CHIP	100	5%	1/16W
R5508	1-216-818-11	RES,CHIP	560	5%	1/16W
R5509	1-216-818-11	RES,CHIP	560	5%	1/16W
R5515	1-218-702-11	METAL CHIP	2.7K	0.50%	1/16W
R5516	1-218-692-11	METAL CHIP	1K	0.50%	1/16W
R5517	1-216-821-11	RES,CHIP	1K	5%	1/16W
R5602	1-216-805-11	RES,CHIP	47	5%	1/16W
R5603	1-216-818-11	RES,CHIP	560	5%	1/16W
R5604	1-216-864-11	SHORT	0		
R5613	1-218-457-11	RES,CHIP	910	5%	1/16W
R5614	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5615	1-216-833-11	RES,CHIP	10K	5%	1/16W
R5616	1-218-725-11	METAL CHIP	24K	0.50%	1/16W
R5617	1-218-718-11	METAL CHIP	12K	0.50%	1/16W
R5618	1-216-839-11	RES,CHIP	33K	5%	1/16W
R5619	1-218-705-11	METAL CHIP	3.6K	0.50%	1/16W
R5620	1-216-825-11	RES,CHIP	2.2K	5%	1/16W
R5621	1-216-805-11	RES,CHIP	47	5%	1/16W
R5623	1-216-805-11	RES,CHIP	47	5%	1/16W
R5624	1-216-829-11	RES,CHIP	4.7K	5%	1/16W

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R5625	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5626	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5640	1-216-829-11	RES,CHIP	4.7K	5%	1/16W
R5669	1-216-809-11	RES,CHIP	100	5%	1/16W
R5670	1-218-457-11	RES,CHIP	910	5%	1/16W
R5671	1-218-457-11	RES,CHIP	910	5%	1/16W
R5698	1-216-805-11	RES,CHIP	47	5%	1/16W
R5699	1-216-805-11	RES,CHIP	47	5%	1/16W
		<NETWORK>			
RB5101	1-233-576-11	RES, CHIP NETWORK 100*4			
RB5204	1-233-576-11	RES, CHIP NETWORK 100*4			
		<THERMISTOR>			
TH5001	1-808-656-11	THERMISTOR			
TH5002	1-806-715-11	THERMISTOR			
		<CRYSTAL>			
X5001	1-767-347-11	VIBRATOR, CRYSTAL (16MHz)			
**********					
	A-1241-314-A	F MOUNT			
		**********			
	1-533-223-11	HOLDER, FUSE (F9001)			
	* 4-374-846-01	COVER, CAPACITOR, CAP TYPE			
		<CAPACITOR>			
C9001	⚠ 1-113-912-51	CERAMIC	0.0047µF	20%	250V
C9002	⚠ 1-113-912-51	CERAMIC	0.0047µF	20%	250V
C9003	⚠ 1-113-513-11	FILM	1µF	20%	275V
C9004	⚠ 1-113-513-11	FILM	1µF	20%	275V
C9005	⚠ 1-113-912-51	CERAMIC	0.0047µF	20%	250V
C9006	⚠ 1-113-912-51	CERAMIC	0.0047µF	20%	250V
		<CONNECTOR>			
CN9001	⚠* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P			
CN9002	⚠* 1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P			
		<FUSE>			
F9001	⚠ 1-576-233-11	FUSE (H.B.C.)(6.3A/250V)			
		<FERRITE BEAD>			
FB9001	⚠ 1-410-396-21	INDUCTOR	0.45µH		
		<COIL>			
L9001	⚠ 1-431-838-11	TRANSFORMER, LINE FILTER			
		<RESISTOR>			
R9001	⚠ 1-202-882-91	SOLID	560K	20%	1/2W
R9002	⚠ 1-202-882-91	SOLID	560K	20%	1/2W
		<VARISTOR>			
VD9001	⚠ 1-801-073-41	VARISTOR ERZV14D471			
**********					
	⚠* A-1316-340-B	GA COMPL			
		**********			
	1-543-923-11	FERRITE	0µH		
	7-682-147-01	SCREW +P 3X6			
	7-682-948-01	SCREW +PSW 3X8			
		<CAPACITOR>			
C8010	⚠ 1-113-513-11	FILM	1µF	20%	275V
C8011	⚠ 1-137-477-61	FILM	0.47µF	10%	400V
C8012	⚠ 1-163-003-91	CERAMIC CHIP	330PF	10%	50V
C8013	⚠ 1-164-492-91	CERAMIC CHIP	0.15µF	10%	16V
C8014	⚠ 1-164-492-91	CERAMIC CHIP	0.15µF	10%	16V
C8015	⚠ 1-163-247-91	CERAMIC CHIP	68PF	5%	50V
C8016	⚠ 1-163-267-91	CERAMIC CHIP	470PF	5%	50V
C8026	⚠ 1-117-751-11	ELECT(BLOCK)	220µF	20%	450V
C8034	⚠ 1-165-319-91	CERAMIC CHIP	0.1µF		50V
C8035	⚠ 1-107-889-91	ELECT	220µF	20%	25V
C8038	⚠ 1-104-330-11	CERAMIC	470PF	10%	1KV
C8039	⚠ 1-104-330-11	CERAMIC	470PF	10%	1KV
C8041	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C8099	⚠ 1-163-009-91	CERAMIC CHIP	0.001µF	10%	50V
		<CONNECTOR>			
CN8001	⚠* 1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P			
CN8002	⚠* 1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P			
CN8003	⚠* 1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P			
CN8004	⚠* 1-564-507-71	PLUG, CONNECTOR 4P			
		<DIODE>			
D8001	⚠ 8-719-066-75	DIODE D6SB80			
D8002	⚠ 8-719-060-06	DIODE FSF10A60			
D8003	⚠ 1-803-136-11	VARISTOR ZP2600			
D8004	⚠ 1-803-136-11	VARISTOR ZP2600			
D8006	⚠ 8-719-066-76	DIODE TF861S			
D8007	⚠ 8-719-055-30	DIODE D1FS4A-TA			
D8008	⚠ 8-719-055-30	DIODE D1FS4A-TA			
D8009	⚠ 8-719-055-30	DIODE D1FS4A-TA			
D8010	⚠ 8-719-055-30	DIODE D1FS4A-TA			
		<IC>			
IC8001	⚠ 8-759-485-61	IC FA5331P			

Rf.NO.	PART NO.	DESCRIPTION				REMARK
		<COIL>				
L8003	⚠ 1-416-534-21	INDUCTOR	760µH			
L8005	⚠ 1-416-461-11	INDUCTOR	60µH			
		<TRANSISTOR>				
Q8001	⚠ 8-729-043-15	TRANSISTOR 2SK3013F-02				
Q8002	⚠ 8-729-043-15	TRANSISTOR 2SK3013F-02				
Q8003	⚠ 8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L				
		<RESISTOR>				
R8001	⚠ 1-219-363-11	FUSIBLE	5.6	5%	5W F	
R8002	⚠ 1-219-363-11	FUSIBLE	5.6	5%	5W F	
R8003	⚠ 1-215-870-11	METAL OXIDE	1.5K	5%	1W F	
R8004	⚠ 1-215-925-11	METAL OXIDE	22K	5%	3W F	
R8005	⚠ 1-215-925-11	METAL OXIDE	22K	5%	3W F	
R8007	⚠ 1-216-003-11	RES,CHIP	12	5%	1/10W	
R8008	⚠ 1-216-077-00	RES,CHIP	15K	5%	1/10W	
R8009	⚠ 1-216-003-11	RES,CHIP	12	5%	1/10W	
R8010	⚠ 1-216-077-00	RES,CHIP	15K	5%	1/10W	
R8011	⚠ 1-220-335-11	RES,CHIP	180K	5%	1/2W	
R8012	⚠ 1-220-336-11	RES,CHIP	220K	5%	1/2W	
R8013	⚠ 1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R8014	⚠ 1-216-073-00	RES,CHIP	10K	5%	1/10W	
R8015	⚠ 1-220-337-11	RES,CHIP	270K	5%	1/2W	
R8016	⚠ 1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R8017	⚠ 1-216-101-00	RES,CHIP	150K	5%	1/10W	
R8018	⚠ 1-216-085-00	RES,CHIP	33K	5%	1/10W	
R8019	⚠ 1-216-005-00	RES,CHIP	15	5%	1/10W	
R8020	⚠ 1-220-335-11	RES,CHIP	180K	5%	1/2W	
R8021	⚠ 1-220-335-11	RES,CHIP	180K	5%	1/2W	
R8022	⚠ 1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R8028	⚠ 1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R8031	⚠ 1-220-337-11	RES,CHIP	270K	5%	1/2W	
R8032	⚠ 1-216-295-91	SHORT	0			
R8034	⚠ 1-217-156-00	REGISTER	0.22	10%	5W F	
R8036	⚠ 1-216-025-91	RES,CHIP	100	5%	1/10W	
R8037	⚠ 1-216-079-00	RES,CHIP	18K	5%	1/10W	
R8038	⚠ 1-216-069-00	RES,CHIP	6.8K	5%	1/10W	
R8039	⚠ 1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R8041	⚠ 1-216-053-00	RES,CHIP	1.5K	5%	1/10W	

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⚠* A-1316-433-A GB COMPL

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1-543-923-11 FERRITE 0µH
7-682-948-01 SCREW +PSW 3X8

<CAPACITOR>

C7001	⚠ 1-107-888-91	ELECT	47µF	20%	25V
C7002	⚠ 1-107-889-91	ELECT	220µF	20%	25V
C7004	⚠ 1-107-914-91	ELECT	1000µF	20%	25V
C7005	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C7006	⚠ 1-107-909-91	ELECT	47µF	20%	10V
C7010	⚠ 1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C7011	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C7012	⚠ 1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C7013	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C7014	⚠ 1-107-889-91	ELECT	220µF	20%	25V
C7016	⚠ 1-163-031-91	CERAMIC CHIP	0.01µF	50V	
C7020	⚠ 1-163-009-91	CERAMIC CHIP	0.001µF	10%	50V
C7026	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C7027	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C7031	⚠ 1-129-718-51	FILM	0.022µF	5%	630V
C7038	⚠ 1-126-524-11	ELECT	180µF	20%	63V
C7040	⚠ 1-115-786-91	ELECT	560µF	20%	25V
C7042	⚠ 1-126-524-11	ELECT	180µF	20%	63V
C7043	⚠ 1-126-524-11	ELECT	180µF	20%	63V
C7044	⚠ 1-115-746-31	ELECT	0.0056F	20%	10V
C7045	⚠ 1-111-240-91	ELECT	100µF	20%	10V
C7046	⚠ 1-107-823-91	CERAMIC CHIP	0.47µF	10%	16V
C7049	⚠ 1-115-734-91	ELECT	680µF	20%	10V
C7052	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C7054	⚠ 1-115-784-91	ELECT	270µF	20%	25V
C7055	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C7056	⚠ 1-111-240-91	ELECT	100µF	20%	10V
C7057	⚠ 1-107-823-91	CERAMIC CHIP	0.47µF	10%	16V
C7059	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C7060	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C7061	⚠ 1-111-244-91	ELECT	47µF	20%	16V
C7062	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C7063	⚠ 1-115-755-91	ELECT	180µF	20%	16V
C7064	⚠ 1-115-734-91	ELECT	680µF	20%	10V
C7065	⚠ 1-107-792-81	CERAMIC	100PF	5%	1KV
C7066	⚠ 1-164-004-91	CERAMIC CHIP	0.1µF	10%	25V
C7067	⚠ 1-111-240-91	ELECT	47µF	20%	16V
C7068	⚠ 1-163-239-91	CERAMIC CHIP	33PF	5%	50V
C7069	⚠ 1-163-239-91	CERAMIC CHIP	33PF	5%	50V
C7070	⚠ 1-163-239-91	CERAMIC CHIP	33PF	5%	50V
C7071	⚠ 1-163-239-91	CERAMIC CHIP	33PF	5%	50V
C7072	⚠ 1-163-239-91	CERAMIC CHIP	33PF	5%	50V
C7073	⚠ 1-129-720-51	FILM	0.033µF	5%	630V
C7074	⚠ 1-115-339-91	CERAMIC CHIP	0.1µF	10%	50V

<CONNECTOR>

CN7001⚠*1-691-960-11 PIN, CONNECTOR (PC BOARD) 3P
CN7002⚠*1-564-507-71 PLUG, CONNECTOR 4P
CN7003⚠*1-778-373-11 PIN, CONNECTOR (PC BOARD)
CN7004⚠*1-778-373-11 PIN, CONNECTOR (PC BOARD)

<DIODE>

D7001	⚠ 8-719-059-23	DIODE P6KE200AG23
D7002	⚠ 8-719-947-06	DIODE RGP10JPKG23
D7003	⚠ 8-719-936-85	DIODE EL1Z
D7004	⚠ 8-719-124-09	DIODE 1S2836
D7005	⚠ 8-719-106-74	DIODE RD12M-B2
D7006	⚠ 1-803-136-11	VARISTOR ZP2600
D7007	⚠ 8-719-022-97	DIODE D2S4MF

Rf.NO.	PART NO.	DESCRIPTION	REMARK
D7009	⚠ 8-719-510-41	DIODE D10SC9M	
D7010	⚠ 8-719-051-96	DIODE FMG-G2CS	
D7011	⚠ 8-719-510-41	DIODE D10SC9M	
D7012	⚠ 8-719-050-21	DIODE FCQ20A04	
D7013	⚠ 8-719-510-13	DIODE D10SC4MR	
D7015	⚠ 8-719-053-92	DIODE F10P06Q	
D7020	⚠ 8-719-914-47	DIODE DAN202K	
D7021	⚠ 8-719-055-30	DIODE D1FS4A-TA	
D7022	⚠ 8-719-055-30	DIODE D1FS4A-TA	
D7023	⚠ 8-719-055-30	DIODE D1FS4A-TA	
D7024	⚠ 8-719-055-30	DIODE D1FS4A-TA	
D7025	⚠ 8-719-510-41	DIODE D10SC9M	
D7026	⚠ 8-719-053-92	DIODE F10P06Q	
D7027	⚠ 8-719-510-41	DIODE D10SC9M	
D7028	⚠ 8-719-050-21	DIODE FCQ20A04	
D7029	⚠ 8-719-055-30	DIODE D1FS4A-TA	
D7030	⚠ 8-719-068-71	DIODE PTZ-TE25-13A	
D7031	⚠ 8-719-068-71	DIODE PTZ-TE25-13A	
D7101	⚠ 8-719-106-80	DIODE RD13M-B2	
		<IC>	
IC7002	⚠ 8-759-157-17	IC PQ05SZ1U	
IC7003	⚠ 8-759-485-64	IC UCC2801N	
IC7005	⚠ 8-759-388-23	IC TL431BCDR2	
IC7006	⚠ 8-759-487-72	IC TOP222Y-BB	
IC7007	⚠ 8-759-485-63	IC MAX1626ESA-TE2	
IC7010	⚠ 8-759-485-63	IC MAX1626ESA-TE2	
IC7012	⚠ 8-759-701-79	IC NJM78L12FA	
IC7013	⚠ 8-759-506-12	IC PQ12RF1	
IC7014	⚠ 8-759-506-12	IC PQ12RF1	
		<COIL>	
L7001	⚠ 1-406-975-61	INDUCTOR 47µH	
L7002	⚠ 1-406-980-61	INDUCTOR 330µH	
L7003	⚠ 1-406-974-61	INDUCTOR 33µH	
L7004	⚠ 1-406-971-61	INDUCTOR 10µH	
L7005	⚠ 1-412-531-21	INDUCTOR 33µH	
L7006	⚠ 1-406-977-61	INDUCTOR 100µH	
L7007	⚠ 1-412-531-31	INDUCTOR 33µH	
L7010	⚠ 1-406-656-21	INDUCTOR 3.3µH	
L7011	⚠ 1-406-656-21	INDUCTOR 3.3µH	
		<PHOTO COUPLER>	
PH7001	⚠ 8-749-010-65	PHOTO COUPLER PC123F2	
PH7002	⚠ 8-749-010-65	PHOTO COUPLER PC123F2	
PH7003	⚠ 8-749-013-16	IC PC357N2T	
		<IC LINK>	
PS7001	⚠ 1-533-282-21	LINK, IC (2A)	
PS7003	⚠ 1-576-124-11	LINK, IC (1A)	
PS7004	⚠ 1-576-124-11	LINK, IC (1A)	
PS7005	⚠ 1-576-124-11	LINK, IC (1A)	
PS7007	⚠ 1-576-124-11	LINK, IC (1A)	
PS7010	⚠ 1-533-282-21	LINK, IC (2A)	
PS7011	⚠ 1-533-282-21	LINK, IC (2A)	
PS7013	⚠ 1-533-282-21	LINK, IC (2A)	
		<TRANSISTOR>	
Q7004	⚠ 8-729-031-13	TRANSISTOR SI-9430DY-T1	
Q7007	⚠ 8-729-230-50	TRANSISTOR 2SC2712-YG	
Q7010	⚠ 8-729-230-50	TRANSISTOR 2SC2712-YG	
Q7013	⚠ 8-729-042-96	TRANSISTOR 2SK2677F-02	
Q7015	⚠ 8-729-031-13	TRANSISTOR SI-9430DY-T1	
Q7018	⚠ 8-729-042-96	TRANSISTOR 2SK2677F-02	
		<RESISTOR>	
R7001	⚠ 1-217-418-61	FUSIBLE 0.47 10% 1/2W F	
R7002	⚠ 1-216-009-91	RES,CHIP 22 5% 1/10W	
R7003	⚠ 1-218-191-71	METAL OXIDE 0.1 5% 1W F	
R7005	⚠ 1-216-295-91	SHORT 0	
R7016	⚠ 1-216-069-91	RES,CHIP 6.8K 5% 1/10W	
R7017	⚠ 1-216-079-91	RES,CHIP 18K 5% 1/10W	
R7018	⚠ 1-216-101-91	RES,CHIP 150K 5% 1/10W	
R7019	⚠ 1-216-685-91	METAL CHIP 27K 0.50% 1/10W	
R7020	⚠ 1-216-023-91	RES,CHIP 82 5% 1/10W	
R7023	⚠ 1-216-023-91	RES,CHIP 82 5% 1/10W	
R7024	⚠ 1-216-390-71	METAL OXIDE 1.2 5% 3W F	
R7025	⚠ 1-216-057-91	RES,CHIP 2.2K 5% 1/10W	
R7029	⚠ 1-216-023-91	RES,CHIP 82 5% 1/10W	
R7030	⚠ 1-216-049-91	RES,CHIP 1K 5% 1/10W	
R7031	⚠ 1-216-647-91	METAL CHIP 680 0.50% 1/10W	
R7032	⚠ 1-216-643-91	METAL CHIP 470 0.50% 1/10W	
R7033	⚠ 1-216-663-91	METAL CHIP 3.3K 0.50% 1/10W	
R7036	⚠ 1-216-025-91	RES,CHIP 100 5% 1/10W	
R7048	⚠ 1-215-929-71	METAL OXIDE 100K 5% 3W F	
R7049	⚠ 1-215-929-71	METAL OXIDE 100K 5% 3W F	
R7051	⚠ 1-216-025-91	RES,CHIP 100 5% 1/10W	
R7052	⚠ 1-216-049-91	RES,CHIP 1K 5% 1/10W	
R7053	⚠ 1-216-077-91	RES,CHIP 15K 5% 1/10W	
R7061	⚠ 1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R7062	⚠ 1-216-069-91	RES,CHIP 6.8K 5% 1/10W	
R7064	⚠ 1-218-191-71	METAL OXIDE 0.1 5% 1W F	
R7067	⚠ 1-216-061-91	RES,CHIP 3.3K 5% 1/10W	
R7068	⚠ 1-216-061-91	RES,CHIP 3.3K 5% 1/10W	
R7069	⚠ 1-216-295-91	SHORT 0	
R7070	⚠ 1-218-191-71	METAL OXIDE 0.1 5% 1W F	
R7072	⚠ 1-218-191-71	METAL OXIDE 0.1 5% 1W F	
R7075	⚠ 1-216-023-91	RES,CHIP 82 5% 1/10W	
R7076	⚠ 1-216-077-91	RES,CHIP 15K 5% 1/10W	
R7078	⚠ 1-216-025-91	RES,CHIP 100 5% 1/10W	
R7079	⚠ 1-216-295-91	SHORT 0	
R7083	⚠ 1-249-389-71	CARBON 4.7 5% 1/4W F	
R7085	⚠ 1-220-302-71	RES,CHIP 10K 5% 1/2W	
R7086	⚠ 1-216-061-91	RES,CHIP 3.3K 5% 1/10W	
R7087	⚠ 1-216-061-91	RES,CHIP 3.3K 5% 1/10W	
R7088	⚠ 1-216-061-91	RES,CHIP 3.3K 5% 1/10W	
R7089	⚠ 1-216-061-91	RES,CHIP 3.3K 5% 1/10W	
R7090	⚠ 1-215-883-71	METAL OXIDE 33 5% 2W F	
R7094	⚠ 1-216-311-91	RES,CHIP 6.8 5% 1/10W	

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Rf.NO.	PART NO.	DESCRIPTION			REMARK
		<TRANSFORMER>			
T7001	⚠ 1-431-680-11	TRANSFORMER, CONVERTER (SRT)			
T7002	⚠ 1-431-613-11	TRANSFORMER, CONVERTER (SRT)			
**********					
	* A-1316-369-B	GBA COMPL			
		**********			
	7-634-109-24	TUBE, SILLICONE VARNISH GLASS			
		<CAPACITOR>			
C7101	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C7102	1-124-589-11	ELECT	47µF	20%	16V
C7103	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C7104	1-124-589-11	ELECT	47µF	20%	16V
C7105	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C7106	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C7107	1-124-589-11	ELECT	47µF	20%	16V
C7108	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C7109	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C7110	1-124-589-11	ELECT	47µF	20%	16V
C7111	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C7115	1-126-155-11	ELECT	100µF	20%	6.3V
C7116	1-128-078-11	ELECT	33µF	20%	25V
C7117	1-128-078-11	ELECT	33µF	20%	25V
C7118	1-164-505-11	CERAMIC CHIP	2.2µF		16V
		<CONNECTOR>			
CN7101	* 1-779-004-11	HOUSING, CONNECTOR			
CN7102	* 1-779-004-11	HOUSING, CONNECTOR			
CN7103	* 1-564-510-11	PLUG, CONNECTOR 7P			
CN7104	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN7105	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN7106	* 1-564-508-11	PLUG, CONNECTOR 5P			
CN7107	* 1-764-334-11	PLUG, CONNECTOR 11P			
CN7108	* 1-564-513-11	PLUG, CONNECTOR 10P			
CN7109	* 1-564-516-11	PLUG, CONNECTOR 13P			
CN7110	* 1-564-506-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D7019	8-719-104-34	DIODE 1S2836			
D7102	8-719-911-19	DIODE 1SS119-25			
D7103	8-719-104-34	DIODE 1S2836			
		<IC>			
IC7101	8-759-296-72	IC PQ12SZ5U			
IC7102	8-759-335-28	IC TA78M09F(TE16L)			
IC7103	8-759-157-17	IC PQ05SZ1U			
IC7104	8-759-045-17	IC NJM79L05UA			
		<TRANSISTOR>			
Q7101	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q7102	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q7103	8-729-230-49	TRANSISTOR 2SC2712-YG			
		<RESISTOR>			
R7004	1-216-421-11	METAL OXIDE	12	5%	1W F
R7063	1-216-421-11	METAL OXIDE	12	5%	1W F
R7077	1-216-295-91	SHORT	0		
R7101	1-216-389-11	METAL OXIDE	1	5%	3W F
R7102	1-215-910-00	METAL OXIDE	68	5%	3W F
R7120	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R7121	1-216-073-00	RES,CHIP	10K	5%	1/10W
R7122	1-216-073-00	RES,CHIP	10K	5%	1/10W
R7123	1-216-075-00	RES,CHIP	12K	5%	1/10W
R7124	1-216-073-00	RES,CHIP	10K	5%	1/10W
R7125	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R7126	1-216-089-91	RES,CHIP	47K	5%	1/10W
R7127	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R7128	1-216-073-00	RES,CHIP	10K	5%	1/10W
R7129	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
**********					
	* A-1375-172-A	H COMPL			
		**********			
		<CONNECTOR>			
CN6001	* 1-764-007-11	PIN, CONNECTOR (SMD) 12P			
CN6002	* 1-580-789-21	PIN, CONNECTOR (SMD) 6P			
CN6003	* 1-580-057-11	PIN, CONNECTOR 4P			
CN6004	* 1-580-055-21	PIN, CONNECTOR 2P			
		<DIODE>			
D6001	8-719-914-43	DIODE DAN202K			
D6002	8-719-914-44	DIODE DAP202K			
D6003	8-719-045-61	DIODE SEC1901C			
D6004	8-719-045-61	DIODE SEC1901C			
D6005	8-719-045-55	DIODE SEC1201C			
D6006	8-719-045-60	DIODE SEC1401C			
D6007	8-719-045-53	DIODE SEC1801C			
D6008	8-719-914-43	DIODE DAN202K			
D6009	8-719-914-43	DIODE DAN202K			
D6010	8-719-914-43	DIODE DAN202K			
D6011	8-719-914-44	DIODE DAP202K			
D6012	8-719-914-44	DIODE DAP202K			
D6013	8-719-914-44	DIODE DAP202K			
D6014	8-719-045-60	DIODE SEC1401C			
D6015	8-719-045-53	DIODE SEC1801C			
D6016	8-719-045-53	DIODE SEC1801C			
D6017	8-719-045-53	DIODE SEC1801C			
D6018	8-719-045-53	DIODE SEC1801C			
D6019	8-719-045-53	DIODE SEC1801C			
D6020	8-719-045-53	DIODE SEC1801C			
D6021	8-719-045-53	DIODE SEC1801C			
D6022	8-719-045-53	DIODE SEC1801C			
D6023	8-719-045-53	DIODE SEC1801C			
D6024	8-719-045-53	DIODE SEC1801C			

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Rf.NO.	PART NO.	DESCRIPTION			REMARK
D6025	8-719-045-53	DIODE SEC1801C			
D6026	8-719-045-53	DIODE SEC1801C			
D6027	8-719-045-53	DIODE SEC1801C			
D6028	8-719-045-53	DIODE SEC1801C			
		<TRANSISTOR>			
Q6001	8-729-027-38	TRANSISTOR DTA144EKA-T146			
Q6002	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q6005	8-729-230-49	TRANSISTOR 2SC2712-YG			
		<RESISTOR>			
R6001	1-216-083-00	RES,CHIP	27K	5%	1/10W
R6002	1-216-075-00	RES,CHIP	12K	5%	1/10W
R6003	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R6004	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R6005	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R6006	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R6007	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6008	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R6009	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6010	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R6011	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R6012	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R6013	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R6014	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R6015	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R6016	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6017	1-216-049-91	RES,CHIP	1K	5%	1/10W
R6018	1-216-037-00	RES,CHIP	330	5%	1/10W
R6019	1-216-075-00	RES,CHIP	12K	5%	1/10W
R6020	1-216-033-00	RES,CHIP	220	5%	1/10W
R6021	1-216-039-00	RES,CHIP	390	5%	1/10W
R6022	1-216-029-00	RES,CHIP	150	5%	1/10W
R6024	1-216-029-00	RES,CHIP	150	5%	1/10W
R6026	1-216-029-00	RES,CHIP	150	5%	1/10W
R6028	1-216-029-00	RES,CHIP	150	5%	1/10W
R6030	1-216-029-00	RES,CHIP	150	5%	1/10W
R6033	1-216-029-00	RES,CHIP	150	5%	1/10W
R6034	1-216-039-00	RES,CHIP	390	5%	1/10W
R6035	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R6038	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
		<SWITCH>			
S6001	1-692-453-11	SWITCH, KEY BOARD (◀(LEFT))			
S6002	1-692-453-11	SWITCH, KEY BOARD (▶(RIGHT))			
S6003	1-692-453-11	SWITCH, KEY BOARD (▼(DOWN))			
S6004	1-692-453-11	SWITCH, KEY BOARD (▲(UP))			
S6005	1-692-453-11	SWITCH, KEY BOARD (ENTER)			
S6006	1-692-453-11	SWITCH, KEY BOARD (MENU)			
S6007	1-692-453-11	SWITCH, KEY BOARD (INPUT)			
S6008	1-692-453-11	SWITCH, KEY BOARD (POWER)			
S6009	1-692-453-11	SWITCH, KEY BOARD (PATTER)			
S6010	1-692-453-11	SWITCH, KEY BOARD (AUTO)			
S6011	1-692-453-11	SWITCH, KEY BOARD (VOLUME –)			
S6012	1-692-453-11	SWITCH, KEY BOARD (VOLUME +)			
S6013	1-692-453-11	SWITCH, KEY BOARD (RESET)			
S6014	1-692-453-11	SWITCH, KEY BOARD (LIGHT)			
**********					
	* 1-668-126-11	PWB, NF			
	*********				
		<CAPACITOR>			
C4007	1-124-589-11	ELECT	47µF	20%	10V
		<CONNECTOR>			
CN4001	* 1-564-518-11	PLUG, CONNECTOR 3P			
		<IC>			
IC4001	8-749-011-03	IC GP1U26X			
		<RESISTOR>			
R4001	1-216-017-91	RES,CHIP	47	5%	1/10W
R4002	1-216-025-91	RES,CHIP	100	5%	1/10W
**********					
	* 1-668-127-11	PWB, NR			
	*********				
		<CAPACITOR>			
C4801	1-124-589-11	ELECT	47µF	20%	10V
		<CONNECTOR>			
CN4801	* 1-564-518-11	PLUG, CONNECTOR 3P			
		<IC>			
IC4801	8-749-011-03	IC GP1U26X			
		<RESISTOR>			
R4801	1-216-017-91	RES,CHIP	47	5%	1/10W
R4802	1-216-025-91	RES,CHIP	100	5%	1/10W
**********					
	* A-1275-150-D	QA COMPL			
	**********				

Rf.NO.	PART NO.	DESCRIPTION			REMARK
	<CAPACITOR>				
C1001	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1003	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C1005	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C1006	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C1007	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C1008	1-126-191-11	ELECT CHIP	0.47µF	20%	50V
C1009	1-126-191-11	ELECT CHIP	0.47µF	20%	50V
C1010	1-115-565-11	CERAMIC CHIP	2.2µF	10%	10V
C1011	1-115-565-11	CERAMIC CHIP	2.2µF	10%	10V
C1012	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1024	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1030	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1040	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C1041	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C1048	1-126-395-11	ELECT CHIP	22µF	20%	16V
C1049	1-126-395-11	ELECT CHIP	22µF	20%	16V
C1050	1-126-601-11	ELECT CHIP	2.2µF	20%	50V
C1051	1-117-681-11	ELECT CHIP	100µF	20%	16V
C1052	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C1053	1-117-681-11	ELECT CHIP	100µF	20%	16V
C1054	1-117-681-11	ELECT CHIP	100µF	20%	16V
C1055	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C1056	1-117-681-11	ELECT CHIP	100µF	20%	16V
C1057	1-117-681-11	ELECT CHIP	100µF	20%	16V
C1058	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C1059	1-117-681-11	ELECT CHIP	100µF	20%	16V
C1060	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1061	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C1062	1-126-603-11	ELECT CHIP	4.7µF	20%	35V
C1065	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C1066	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1068	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C1069	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1072	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1073	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C1074	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1075	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C1077	1-117-681-11	ELECT CHIP	100µF	20%	16V
C1078	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1079	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1080	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1081	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1082	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1083	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1084	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1085	1-124-779-00	ELECT CHIP	10µF	20%	16V
C1086	1-107-823-11	CERAMIC CHIP	0.47µF	10%	16V
C1087	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C1088	1-126-204-11	ELECT CHIP	47µF	20%	16V
C1089	1-126-204-11	ELECT CHIP	47µF	20%	16V
C1090	1-163-023-00	CERAMIC CHIP	0.015µF	10%	50V
C1091	1-163-023-00	CERAMIC CHIP	0.015µF	10%	50V
C1092	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1093	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1094	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1095	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C1096	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
C1097	1-107-682-11	CERAMIC CHIP	1µF	10%	16V
	<CONNECTOR>				
CN1001	* 1-580-789-21	PIN, CONNECTOR (SMD) 6P			
CN1002	* 1-569-775-21	PIN, CONNECTOR 5P			
CN1003	* 1-580-057-11	PIN, CONNECTOR 4P			
CN1004	* 1-764-007-11	PIN, CONNECTOR (SMD) 12P			
	<DIODE>				
D1001	8-719-158-37	DIODE RD9.1SB2			
D1002	8-719-158-37	DIODE RD9.1SB2			
D1003	8-719-158-37	DIODE RD9.1SB2			
D1004	8-719-158-37	DIODE RD9.1SB2			
D1005	8-719-158-37	DIODE RD9.1SB2			
D1007	8-719-158-37	DIODE RD9.1SB2			
D1008	8-719-158-37	DIODE RD9.1SB2			
D1009	8-719-914-43	DIODE DAN202K			
D1010	8-719-914-44	DIODE DAP202K			
D1011	8-719-036-76	DIODE RD3.3SB2-T1			
D1012	8-719-914-43	DIODE DAN202K			
D1013	8-719-914-43	DIODE DAN202K			
D1014	8-719-158-37	DIODE RD9.1SB2			
D1015	8-719-158-37	DIODE RD9.1SB2			
D1016	8-719-036-76	DIODE RD3.3SB2-T1			
	<IC>				
IC1001	8-759-285-61	IC PC74HC123D-T			
IC1006	8-759-983-69	IC LM358PS			
IC1007	8-759-524-84	IC TEA2025D-013TR			
IC1008	8-752-074-42	IC CXA1946AR			
IC1009	8-759-983-69	IC LM358PS			
	<JACK>				
J1001	1-563-935-11	JACK, STEREO HEADPHONE (AUDIO INPUT A)			
J1002	1-563-935-11	JACK, STEREO HEADPHONE (AUDIO INPUT B)			
J1004	1-563-935-11	JACK, STEREO HEADPHONE (AUDIO OUT)			
J1005	1-563-935-11	JACK, STEREO HEADPHONE (CONTROL S IN)			
	<COIL>				
L1001	1-412-363-21	FERRITE	0µH		
L1002	1-412-363-21	FERRITE	0µH		
L1003	1-412-363-21	FERRITE	0µH		
L1004	1-412-363-21	FERRITE	0µH		
L1005	1-412-363-21	FERRITE	0µH		
L1006	1-412-363-21	FERRITE	0µH		
L1008	1-412-363-21	FERRITE	0µH		
L1009	1-412-363-21	FERRITE	0µH		
L1010	1-412-363-21	FERRITE	0µH		
L1011	1-412-363-21	FERRITE	0µH		
L1012	1-412-363-21	FERRITE	0µH		

QA QB QC

Rf.NO.	PART NO.	DESCRIPTION			REMARK
	<TRANSISTOR>				
Q1001	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1002	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1003	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1004	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1005	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1007	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1008	1-801-806-11	TRANSISTOR DTC144EKA-T146			
Q1011	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1012	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1013	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1014	8-729-230-49	TRANSISTOR 2SC2712-YG			
	<RESISTOR>				
R1001	1-216-308-00	RES,CHIP	4.7	5%	1/10W
R1002	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1003	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1004	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1005	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1007	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1008	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1009	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1010	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1011	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1012	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1013	1-216-148-00	RES,CHIP	8.2	5%	1/8W
R1014	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1015	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1017	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1018	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1027	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1028	1-216-025-91	RES,CHIP	100	5%	1/10W
R1029	1-216-025-91	RES,CHIP	100	5%	1/10W
R1033	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1034	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1037	1-216-025-91	RES,CHIP	100	5%	1/10W
R1054	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1055	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1058	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1059	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1062	1-216-025-91	RES,CHIP	100	5%	1/10W
R1072	1-216-025-91	RES,CHIP	100	5%	1/10W
R1074	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1076	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1077	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1079	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1080	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1082	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1083	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1084	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1085	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1086	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1087	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1088	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1089	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1090	1-216-041-00	RES,CHIP	470	5%	1/10W
R1091	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1092	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1093	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1094	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1095	1-216-295-91	SHORT	0		
R1096	1-216-295-91	SHORT	0		
R1097	1-216-295-91	SHORT	0		
R1098	1-216-295-91	SHORT	0		
R1099	1-216-295-91	SHORT	0		
R1100	1-216-295-91	SHORT	0		
R1102	1-216-295-91	SHORT	0		
R1103	1-216-295-91	SHORT	0		
R1104	1-216-295-91	SHORT	0		
R1106	1-216-295-91	SHORT	0		
R1107	1-216-295-91	SHORT	0		
R1108	1-216-295-91	SHORT	0		
R1109	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1110	1-216-025-91	RES,CHIP	100	5%	1/10W
R1111	1-216-025-91	RES,CHIP	100	5%	1/10W
R1112	1-216-025-91	RES,CHIP	100	5%	1/10W
R1114	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1116	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1117	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1118	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1119	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1120	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1121	1-216-025-91	RES,CHIP	100	5%	1/10W
R1122	1-216-025-91	RES,CHIP	100	5%	1/10W
R1123	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1124	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1125	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1126	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1127	1-216-073-00	RES,CHIP	10K	5%	1/10

****

* 1-668-130-15 PWB, QB (X1000E/X1000U only)
****

<CONNECTOR>

CN1501 * 1-766-383-11 PIN, CONNECTOR (1.5MM)(SMD) 12P

<JACK>

J1501 1-770-053-11 TERMINAL BLOCK,S (LIGHT ANGLE)

****

* A-1275-169-A QC COMPL
****

<CAPACITOR>

C1601	1-117-681-11	ELECT CHIP	100µF	20%	16V
C1602	1-107-725-11	CERAMIC CHIP	0.1µF	10%	16V

Rf.NO.	PART NO.	DESCRIPTION	REMARK
C1603	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1604	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1605	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1606	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1607	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1608	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1609	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1610	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1611	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1612	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1613	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1614	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1615	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1616	1-107-725-11	CERAMIC CHIP 0.1µF 10% 16V	
C1617	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1618	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1619	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C1620	1-117-681-11	ELECT CHIP 100µF 20% 16V	
		<CONNECTOR>	
CN1600	1-778-830-21	CONNECTOR (BUS)(MOUSE(INPUT A))	
CN1601	* 1-569-775-21	PIN, CONNECTOR 5P	
CN1602	1-778-830-21	CONNECTOR (BUS)(MOUSE(INPUT B))	
		<DIODE>	
D1602	8-719-988-61	DIODE 1SS355TE-17	
D1603	8-719-988-61	DIODE 1SS355TE-17	
D1604	8-719-058-24	DIODE RB501V-40TE-17	
D1605	8-719-158-15	DIODE RD5.6SB	
D1606	8-719-988-61	DIODE 1SS355TE-17	
D1608	8-719-158-15	DIODE RD5.6SB	
D1609	8-719-158-15	DIODE RD5.6SB	
D1610	8-719-158-15	DIODE RD5.6SB	
D1611	8-719-158-15	DIODE RD5.6SB	
D1612	8-719-158-15	DIODE RD5.6SB	
D1613	8-719-158-15	DIODE RD5.6SB	
D1614	8-719-158-15	DIODE RD5.6SB	
D1615	8-719-988-61	DIODE 1SS355TE-17	
D1616	8-719-158-15	DIODE RD5.6SB	
D1617	8-719-158-15	DIODE RD5.6SB	
D1618	8-719-158-15	DIODE RD5.6SB	
D1619	8-719-988-61	DIODE 1SS355TE-17	
D1627	8-719-158-15	DIODE RD5.6SB	
D1628	8-719-158-15	DIODE RD5.6SB	
D1629	8-719-158-15	DIODE RD5.6SB	
D1630	8-719-158-15	DIODE RD5.6SB	
D1631	8-719-158-15	DIODE RD5.6SB	
D1632	8-719-158-15	DIODE RD5.6SB	
D1633	8-719-158-15	DIODE RD5.6SB	
D1634	8-719-158-15	DIODE RD5.6SB	
D1635	8-719-158-15	DIODE RD5.6SB	
D1636	8-719-158-15	DIODE RD5.6SB	
D1637	8-719-158-37	DIODE RD9.1SB2	
D1638	8-719-158-15	DIODE RD5.6SB	
D1639	8-719-158-37	DIODE RD9.1SB2	
D1640	8-719-158-15	DIODE RD5.6SB	

Rf.NO.	PART NO.	DESCRIPTION	REMARK
D1641	8-719-988-61	DIODE 1SS355TE-17	
D1642	8-719-988-61	DIODE 1SS355TE-17	
D1643	8-719-058-24	DIODE RB501V-40TE-17	
D1644	8-719-158-15	DIODE RD5.6SB	
D1645	8-719-988-61	DIODE 1SS355TE-17	
D1651	8-719-988-61	DIODE 1SS355TE-17	
D1653	8-719-988-61	DIODE 1SS355TE-17	
		<IC>	
IC1601	8-759-186-43	IC TC74VHC123AF	
IC1602	8-759-553-48	IC RCV2	
IC1603	8-759-186-43	IC TC74VHC123AF	
IC1604	8-759-553-48	IC RCV2	
		<TRANSISTOR>	
Q1602	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1603	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1605	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1606	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1608	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1609	8-729-216-22	TRANSISTOR 2SA1162-G	
		<RESISTOR>	
R1600	1-216-295-91	SHORT 0	
R1601	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R1602	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1603	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R1604	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1605	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1606	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1607	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1608	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1609	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R1610	1-216-295-91	SHORT 0	
R1611	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R1612	1-216-017-91	RES,CHIP 47 5% 1/10W	
R1613	1-216-121-91	RES,CHIP 1M 5% 1/10W	
R1614	1-216-017-91	RES,CHIP 47 5% 1/10W	
R1615	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1616	1-216-017-91	RES,CHIP 47 5% 1/10W	
R1617	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1618	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R1619	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1621	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R1622	1-216-083-00	RES,CHIP 27K 5% 1/10W	
R1623	1-216-295-91	SHORT 0	
R1624	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1625	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1626	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1627	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R1628	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1629	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1630	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1631	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1632	1-216-081-00	RES,CHIP 22K 5% 1/10W	

Rf.NO.	PART NO.	DESCRIPTION			REMARK
R1633	1-216-295-91	SHORT	0		
R1634	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1635	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1636	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1637	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1638	1-216-025-91	RES,CHIP	100	5%	1/10W
R1639	1-216-017-91	RES,CHIP	47	5%	1/10W
R1640	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1641	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1643	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1644	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1645	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1646	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1647	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1648	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1649	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1650	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1651	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1652	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1653	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1654	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1655	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1656	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1657	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1658	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1659	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1660	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1661	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1662	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1664	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1666	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1667	1-216-089-91	RES,CHIP	47K	5%	1/10W
		<CRYSTAL>			
X1600	1-578-689-21	VIBRATOR (8MHz)			
X1601	1-578-689-21	VIBRATOR (8MHz)			
**********					
	* 1-672-792-11	PWB, QD			
		*********			
		<CONNECTOR>			
CN1801	* 1-580-056-21	PIN, CONNECTOR (SMD) 3P			
		<SWITCH>			
S1801	1-570-134-11	SWITCH, SLIDE (IN/OUT(RGB IN/OUT))			
**********					

Rf.NO.	PART NO.	DESCRIPTION	REMARK
	* 1-668-125-11	PWB, U	
		********	
		<CONNECTOR>	
CN4101	* 1-564-517-11	PLUG, CONNECTOR 2P	
		<SWITCH>	
S4101	1-570-245-11	SWITCH, MICRO (LAMP)	
**********			
	* 1-668-124-11	PWB, V	
		<CONNECTOR>	
CN4201	* 1-564-517-11	PLUG, CONNECTOR 2P	
		<SWITCH>	
S4201	1-570-245-11	SWITCH, MICRO (FILTER)	
**********			
		MISCELLANEOUS	
		**********	
	⚠1-468-286-11	POWER BLOCK	
	1-475-689-51	CONVERTE UNIT, SCAN (BB BOARD)	
	1-500-082-11	CLAMP, SLEEVE FERRITE	
	1-500-249-11	BEAD, FERRITE (CASE)	
	1-504-847-11	SPEAKER (2.8cm)	
	1-505-282-11	SPEAKER (057F006)	
	⚠1-526-954-11	INLET, AC	
	1-763-069-11	FAN, DC	
	1-763-070-11	FAN, DC	
	1-763-101-11	FAN, DC	
**********			
		ACCESSORIES	
		**********	
	1-475-735-51	REMOTE COMMANDER (RM-PJM600)	
	⚠1-557-377-11	CORD, POWER (3 CORE) 10A/125V (X1000U)	
	1-575-334-11	CORD, CONNECTION (X1000M/X1000U)	
	1-774-626-11	ADAPTOR, CONVERSION	
	⚠1-777-649-11	CORD, POWER 10A/250V (X1000E)	
	1-777-743-11	CABLE (15PDSUBX2 CONNECTOR)	
	⚠1-782-929-11	CORD, POWER SUPPLY (BS 3P) 10A/250V (1000M)	
	3-862-351-13	INSTALLATION MANUAL FOR DEALERS (ENGLISH/FRENCH/SPANISH)	
	3-862-351-33	INSTALLATION MANUAL FOR DEALERS (SIMPLIFIED CHINESE)(X1000M)	

Rf.NO.	PART NO.	DESCRIPTION	REMARK
	3-862-351-23	INSTALLATION MANUAL FOR DEALERS (GERMAN/ITALIAN)(X1000E)	
	3-865-632-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH/SPANISH)	
	3-865-632-21	MANUAL, INSTRUCTION (GERMAN/ITALIAN)(X1000E)	
	3-865-632-31	MANUAL, INSTRUCTION (SIMPLIFIED CHINESE)(X1000M)	
	4-063-684-01	FILTER	
*	X-4035-681-1	COVER ASSY, FRONT	

****

RM-PJM600

Ref.No.	Part No.	Description	Remark
	1-475-735-51	REMOTE COMMANDER	
	9-880-535-01	BATTERY COVER (FOR RM-PJM600)	

IFB-X600E

Ref.No.	Part No.	Description	Remark
*	A-1275-152-A	QB BOARD, COMPLETE	
		**********	
		<CONNECTOR>	
CN1501 *	1-766-383-11	PIN, CONNECTOR (1.5MM)(SMD)12P	
		<JACK>	
J1501	1-770-053-11	TERMINAL BLOCK, S(LIGHT ANGLE)	

****

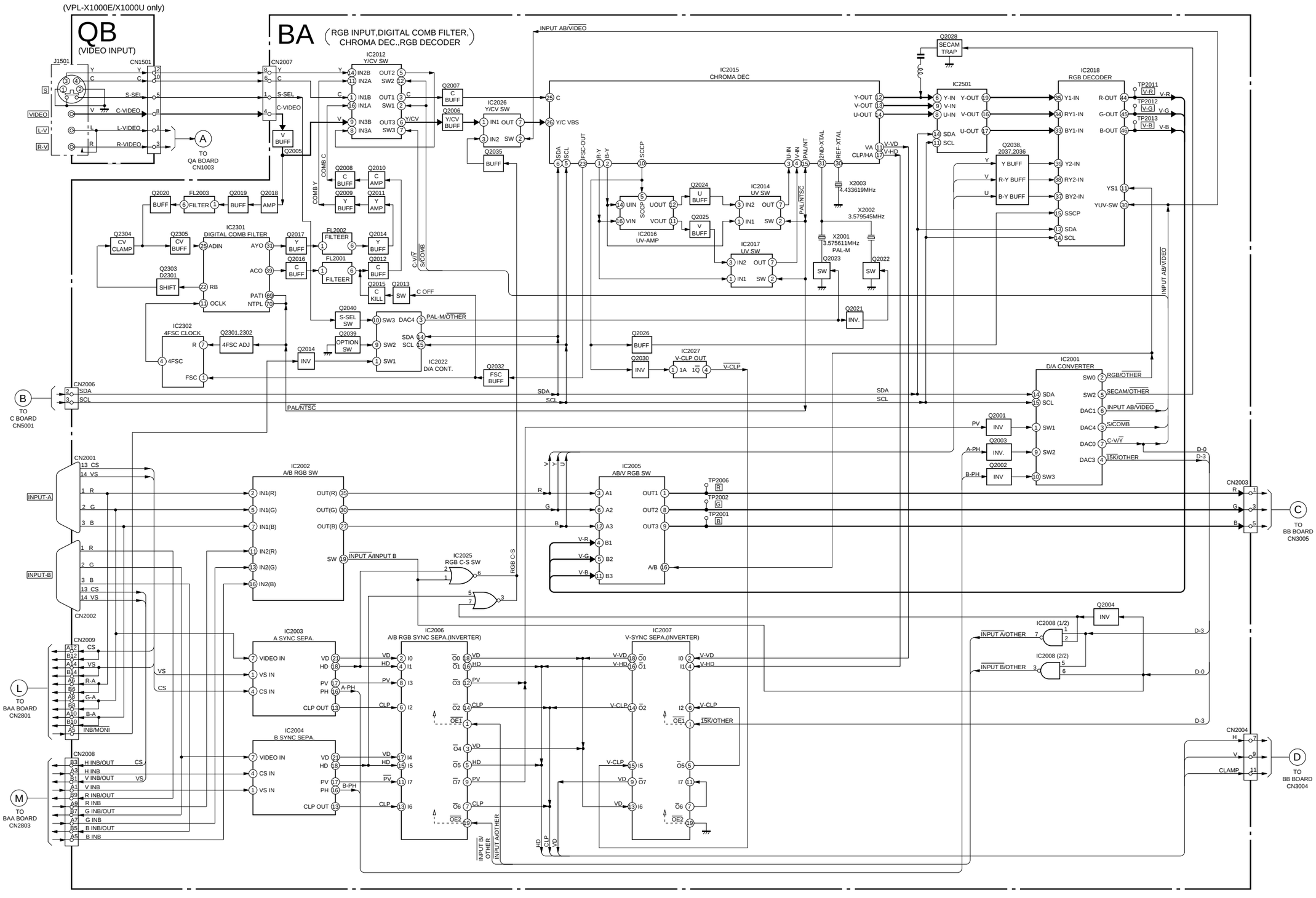
		ACCESSORIES AND PACKING MATERIALS	
		**********	
	1-575-334-11	CORD, CONNECTION	
	3-862-502-11	INSTALLATION MANUAL (E/F/G/S/I)	

PSS-600

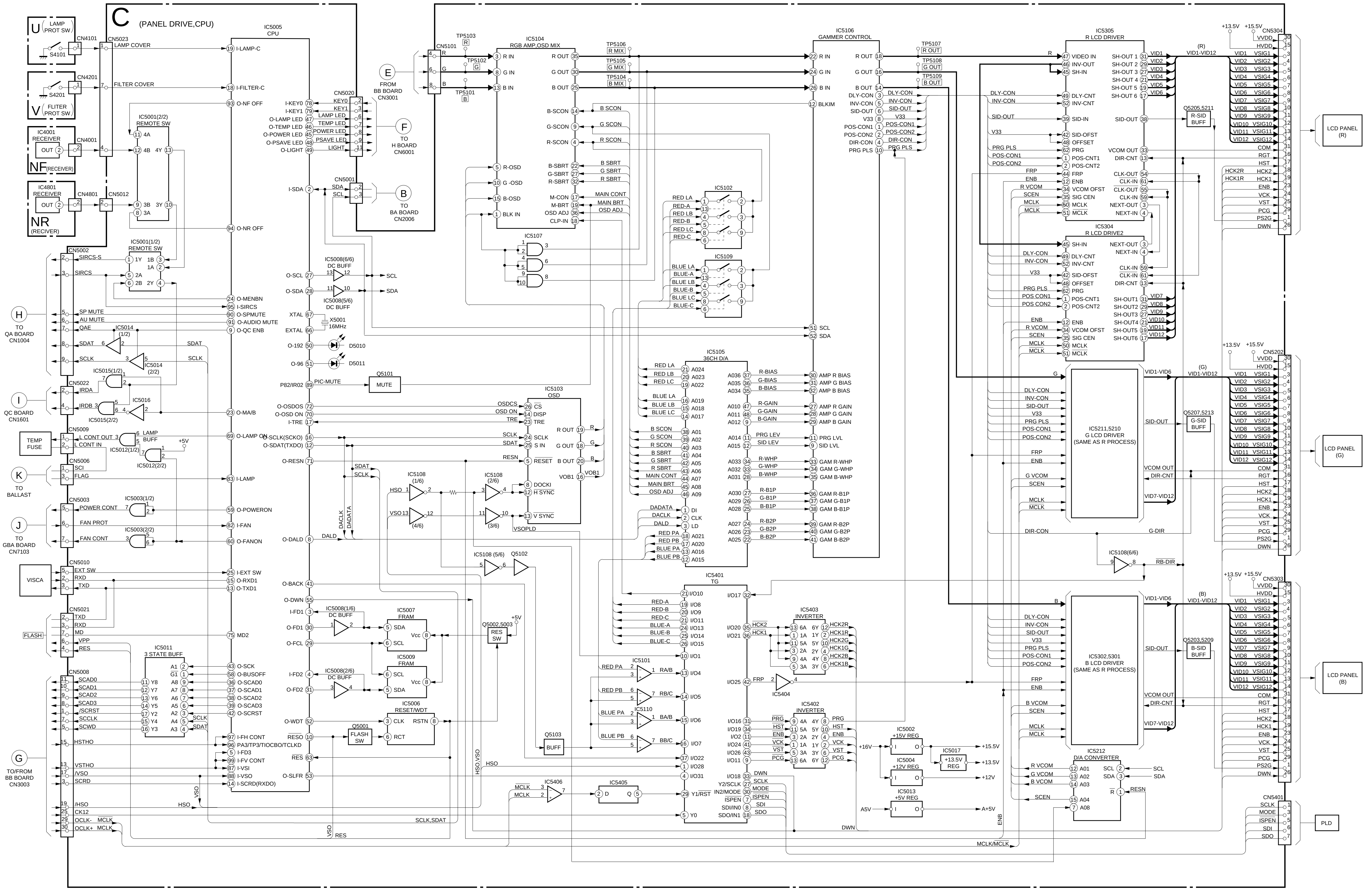
Ref.No.	Part No.	Description	Remark
		ACCESSORIES AND PACKING MATERIALS	
		**********	
	3-862-500-01	INSTALLATION MANUAL (J/E/F/G/S/I/C2)	
	4-047-742-01	NUT (M8), HEXAGON	
	4-047-743-01	WASHER, TOOTHED LOCK	
	4-047-744-01	PIN	
	4-047-746-01	BOLT (M8X50), HEXAGON	
	4-047-748-01	WASHER (M8), FLAT	
	4-047-765-01	SCREW (M4X6), +P	
	4-047-903-01	PIN, SNAP	
	4-063-982-01	BOLT (M5), HEXAGON HEAD	
	4-063-983-01	WASHER (M5), PLAIN	
	4-063-984-01	WASHER (M5), LOCK SPRING	
*	4-063-985-01	BRACKET, PROJECTOR	

SECTION 7
BLOCK DIAGRAMS

7-1. BA, QB BOARD BLOCK DIAGRAM



7-2. C, NF, NR, U and V BOARD BLOCK DIAGRAM


C (PANEL DRIVE,CPU)
U (LAMP PROT SW)
V (FLITER PROT SW)
NF (RECEIVER)
NR (RECIVER)
IC5005 CPU
IC5001(2/2) REMOTE SW
IC5001(1/2) REMOTE SW
IC5104 RGB AMP,OSD MIX
IC5106 GAMMER CONTROL
IC5305 R LCD DRIVER
IC5304 R LCD DRIVE2
IC5211,5210 G LCD DRIVER (SAME AS R PROCESS)
IC5302,5301 B LCD DRIVER (SAME AS R PROCESS)
IC5102
IC5109
IC5107
IC5105 36CH D/A
IC5103 OSD
IC5401 TG
IC5403 INVERTER
IC5402 INVERTER
IC5404
IC5101
IC5110
IC5405
IC5406
IC5011 3 STATE BUFF
IC5007 FRAM
IC5009 FRAM
IC5006 RESET/WDT
IC5002 +15V REG
IC5004 +12V REG
IC5013 +5V REG
IC5017 +13.5V REG
IC5212 D/A CONVERTER
IC5108(6/6)
Q5101 MUTE
Q5001 FLASH SW
Q5002,5003 RES SW
Q5103 BUFF
Q5205,5211 R-SID BUFF
Q5207,5213 G-SID BUFF
Q5203,5209 B-SID BUFF
E FROM BB BOARD CN3001
F TO H BOARD CN6001
B TO BA BOARD CN2006
H TO QA BOARD CN1004
I QC BOARD CN1601
K TO BALLAST
J TO GBA BOARD CN7103
G TO/FROM BB BOARD CN3003
TEMP FUSE
VISCA
FLASH
LCD PANEL (R)
LCD PANEL (G)
LCD PANEL (B)
PLD

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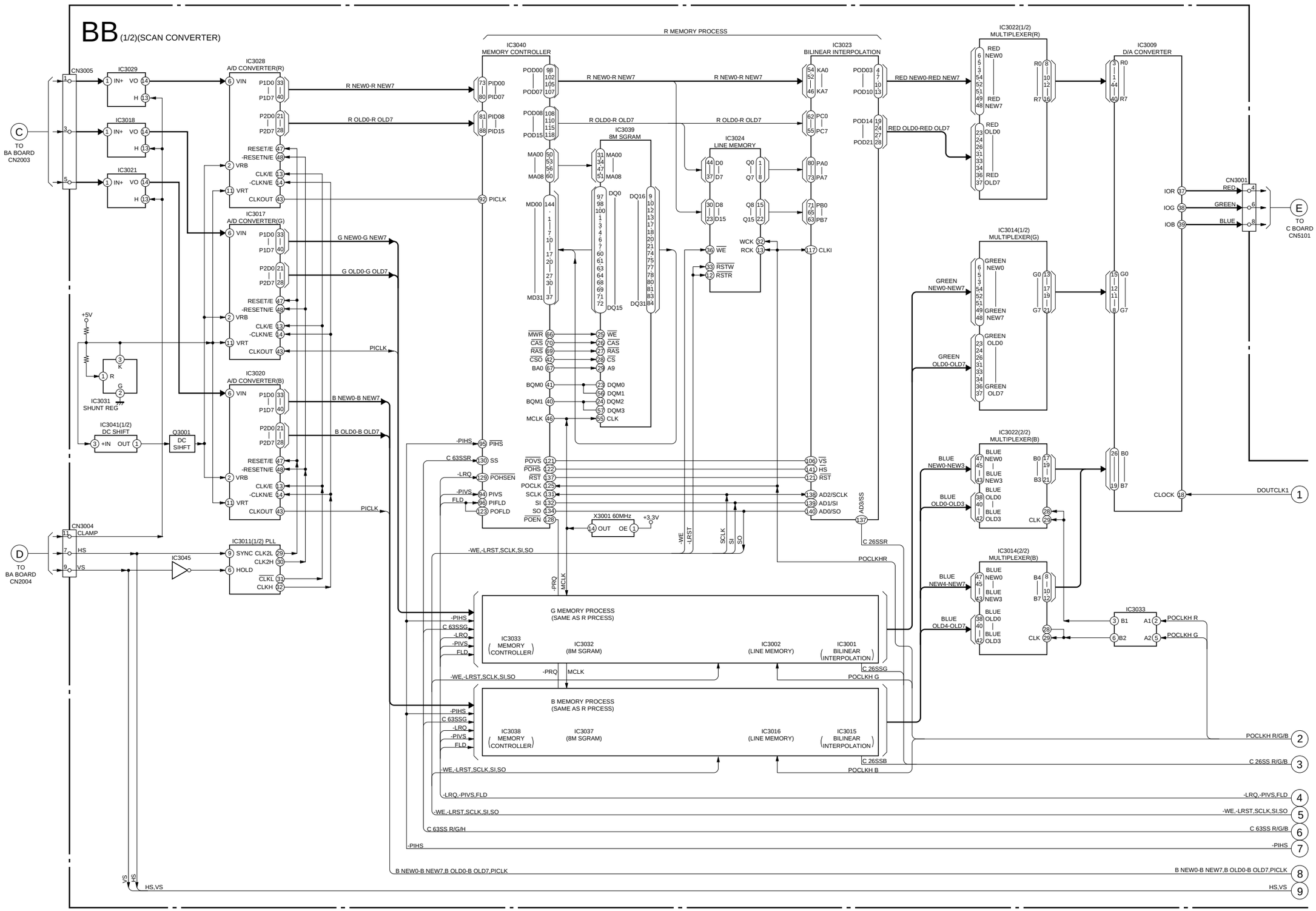
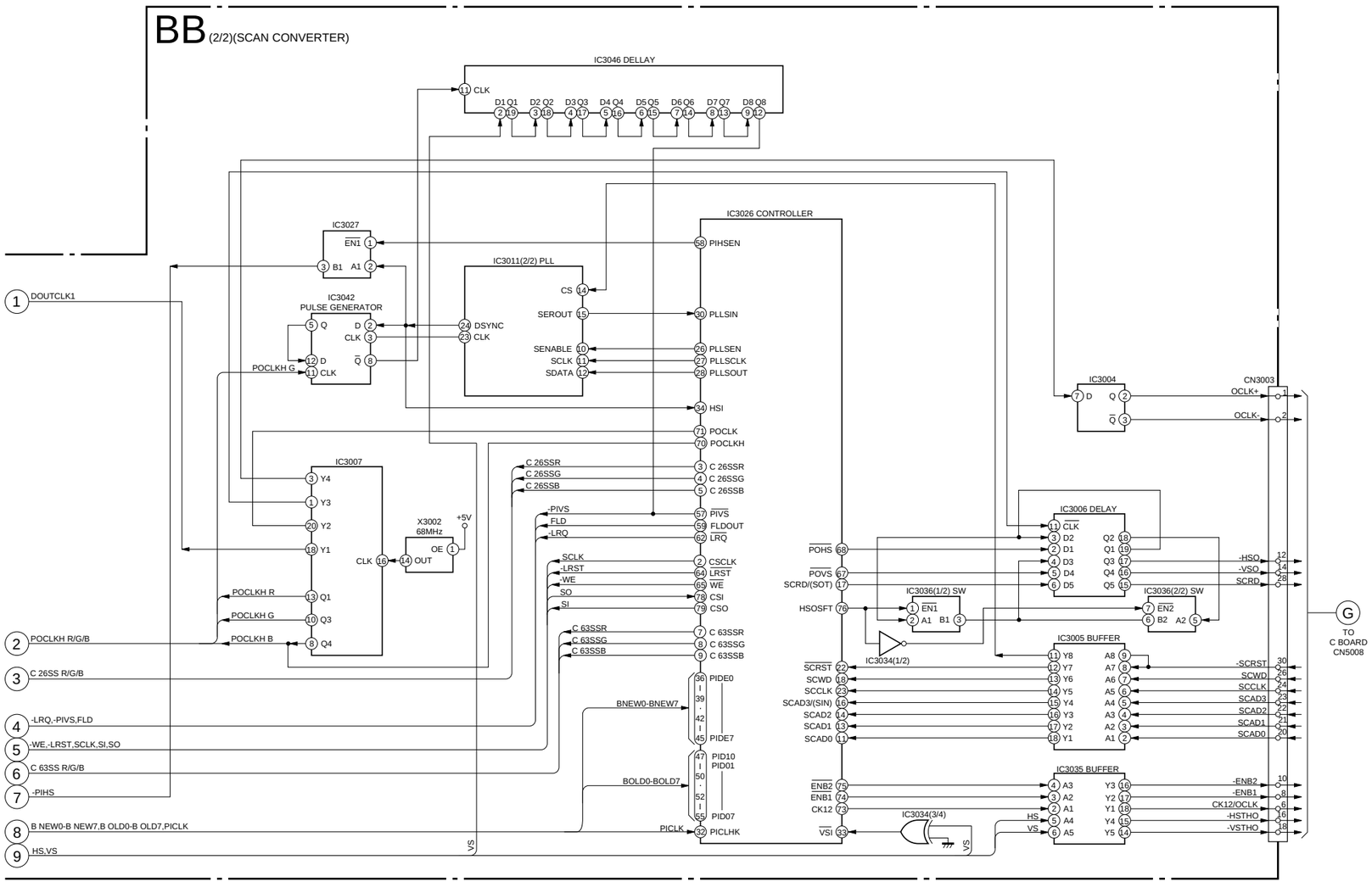
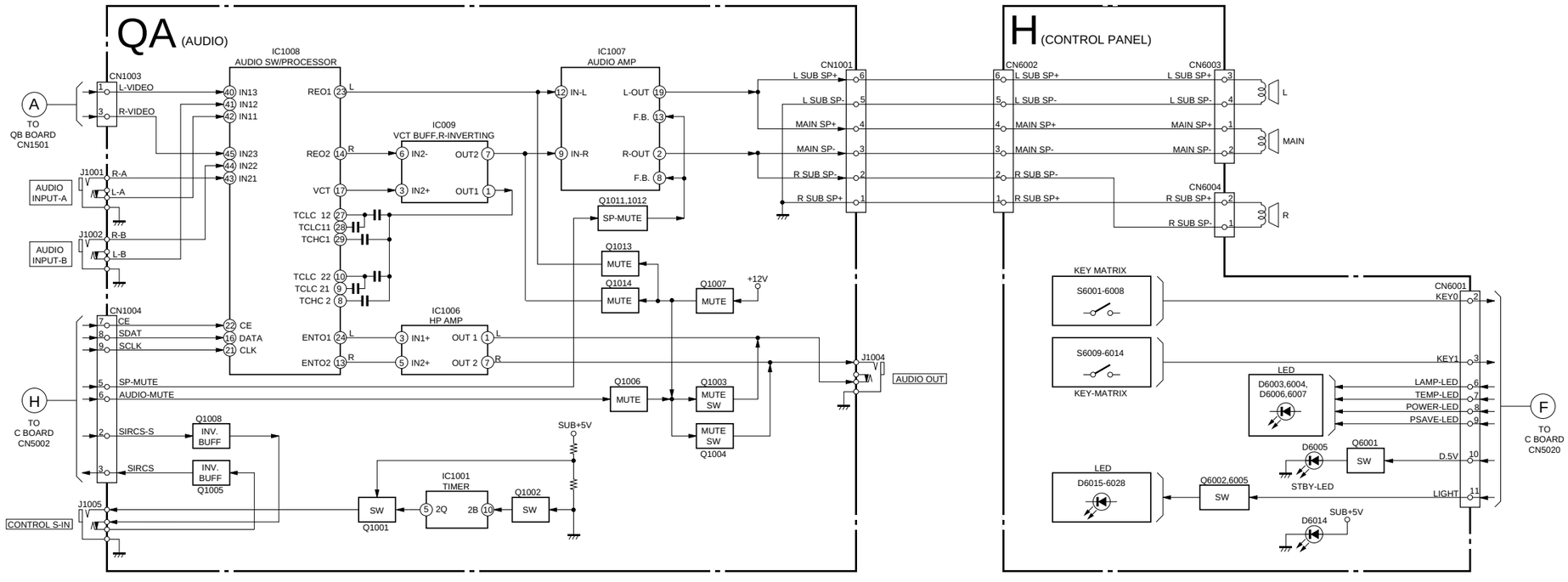
7-3. BB BOARD BLOCK DIAGRAM (1/2)

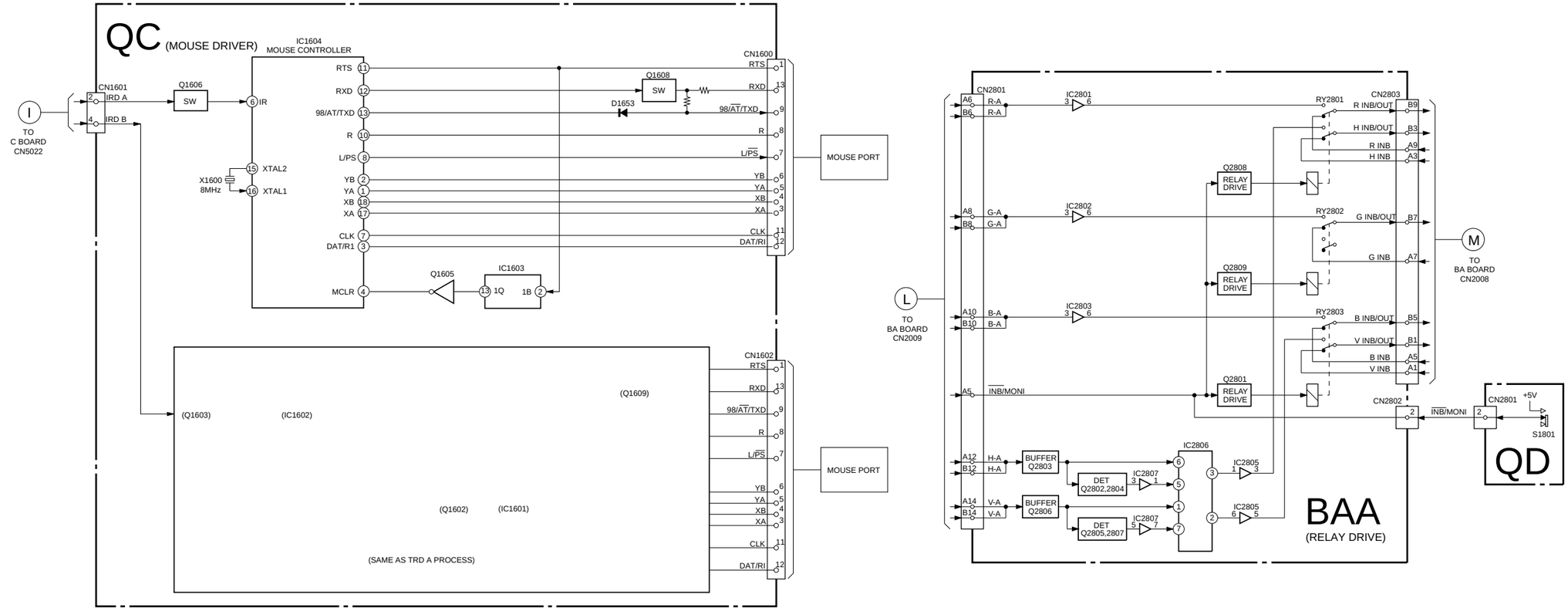


7-4. BB BOARD BLOCK DIAGRAM (2/2)

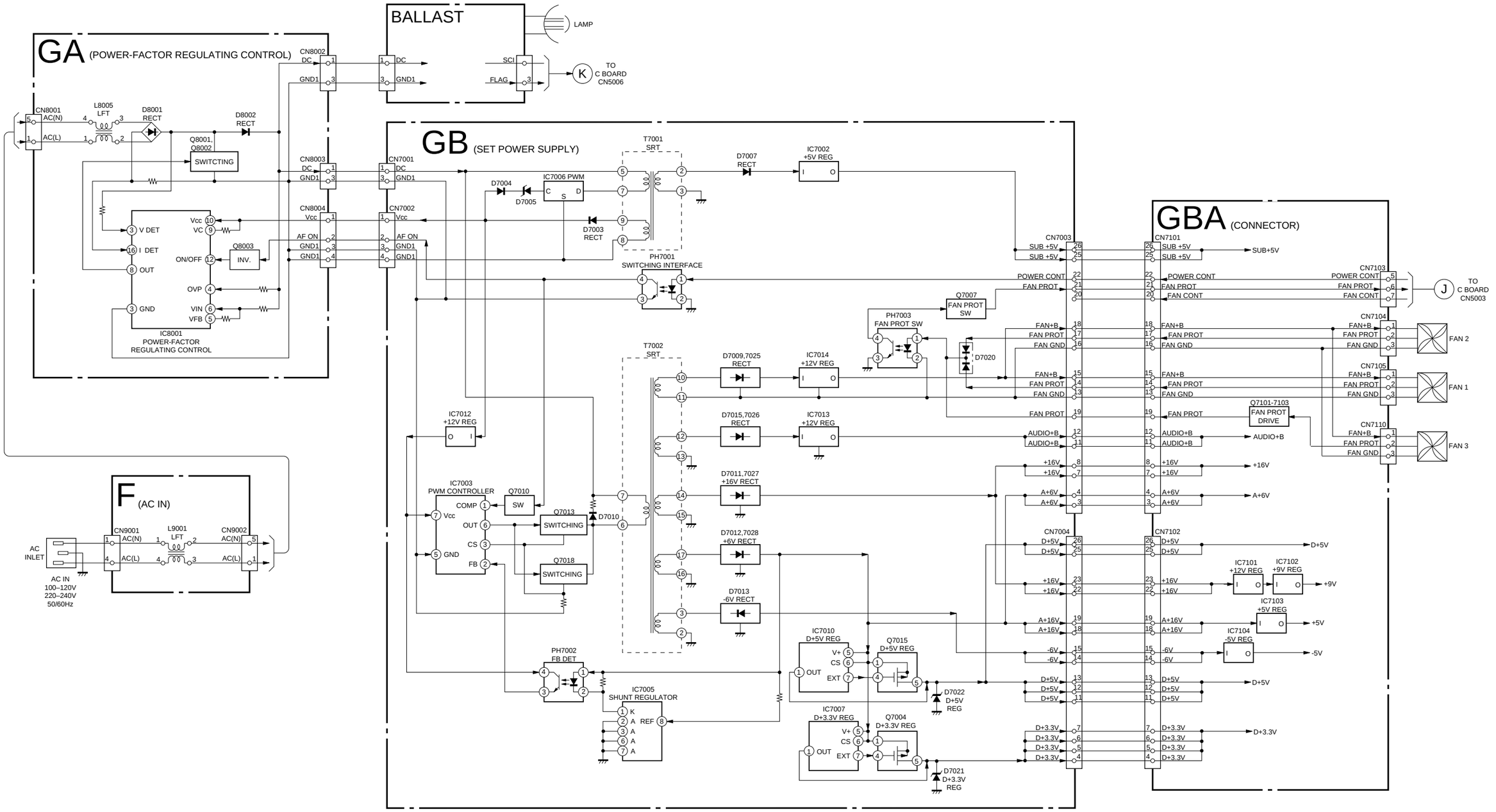


7-5. BAA, H, QA and QC BOARD BLOCK DIAGRAM



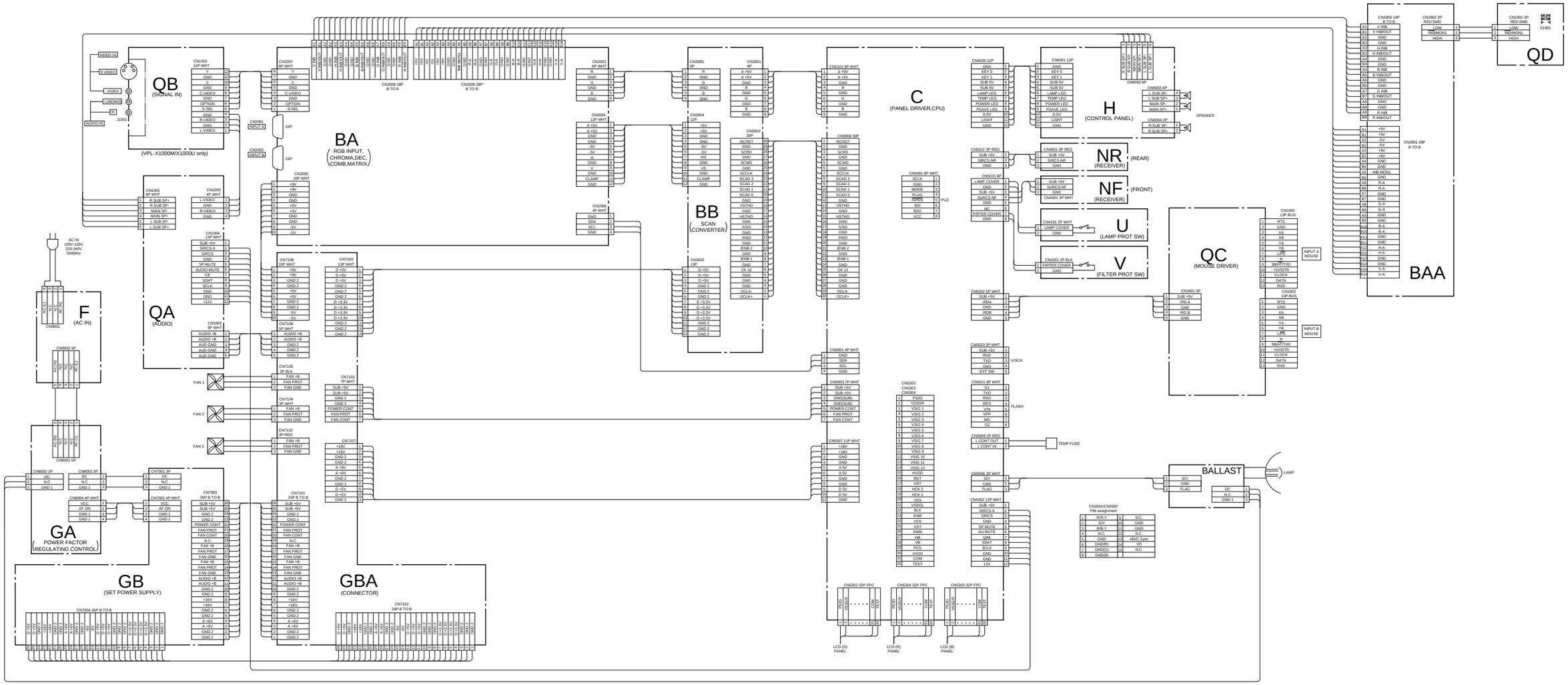


7-6. F, GA, GB and GBA BOARD BLOCK DIAGRAM



SECTION 8
DIAGRAMS

8-1. FRAME SCHEMATIC DIAGRAM



8-2. SCHEMATIC DIAGRAMS/PRINTED WIRING BOARDS

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4W

- All resistors are in ohms. (1M: 1000kΩ, 1k: 1000Ω)
- : nonflammable resistor.
- Chip resister are 1/10W unless otherwise noted.
- : fusible resistor.
- △ : internal component.
- ▭ : panel designation and adjustment repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- METAL CHIP (:RN, :RN-CP) resister in 1%, 0.5%, 1/4W unless otherwise specified.
- The components identified by in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by , make the necessary adjustments indicated, If results do not meet the specified value change the component identified by and repeat the adjustment until the specified value is achieved. (Refer to page 4-1 and 4-2.)
- All voltages are in V.
- Reading are taken with Component color-bar signal (R.G.B SYNC) input.
- Voltage are dc with respect to ground unless otherwise noted.
- no mark : 14G1/14G5 series and comon
  ( ) : 20G1 series
- Voltage variation may be noted due to normal production tolerancd.
- ▽ : B+, B– line
- ⇨ : signal path
- Circled numbers are waveforms reference.

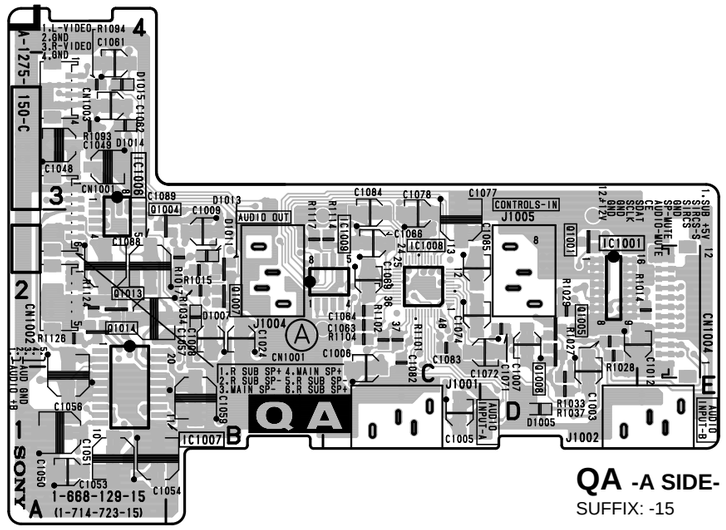
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

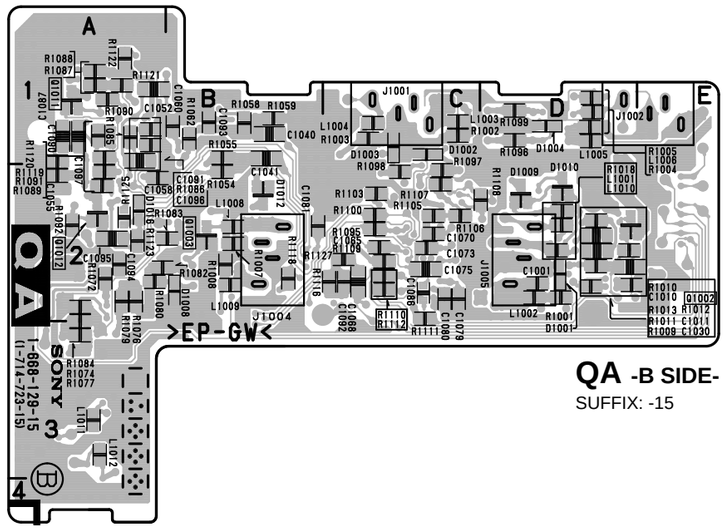
QA BOARD



QA -A SIDE-
SUFFIX: -15

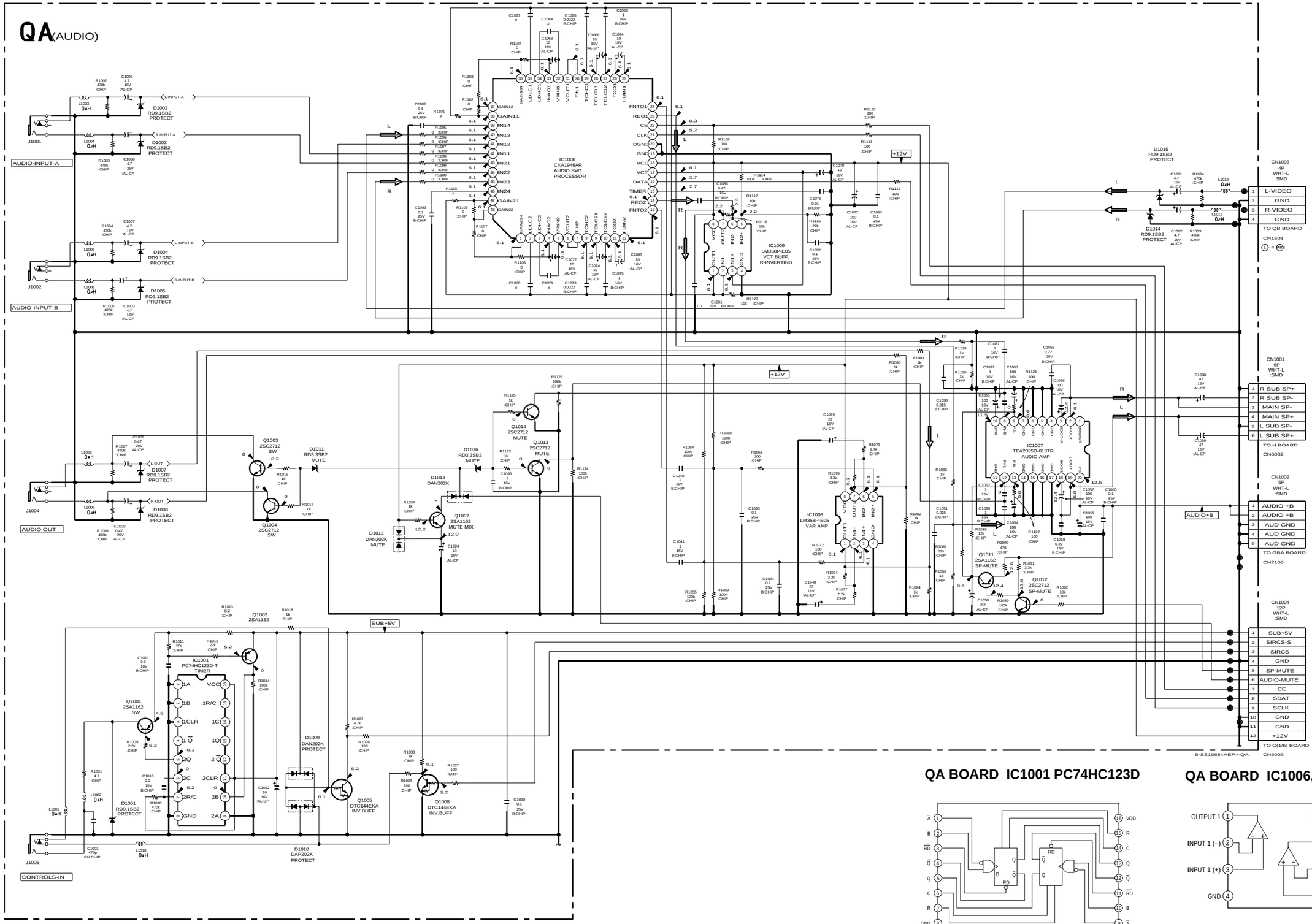
QA BOARD
*: B SIDE

*D1001	D-2	
*D1002	C-1	
*D1003	C-1	
*D1004	D-1	
D1005	D-1	
D1007	B-2	
*D1008	B-2	
*D1009	D-2	
*D1010	D-2	
D1011	B-2	
*D1012	B-2	
D1013	B-2	
D1014	A-3	
D1015	A-3	
D1016	A-2	
IC1001	D-2	
IC1006	A-2	
IC1007	A-1	
IC1008	C-2	
IC1009	C-2	
Q1001	D-2	
*Q1002	D-2	
*Q1003	B-2	
Q1004	B-2	
Q1005	D-2	
Q1007	B-2	
Q1008	D-2	
*Q1011	A-1	
*Q1012	A-2	
Q1013	A-2	
Q1014	A-2	

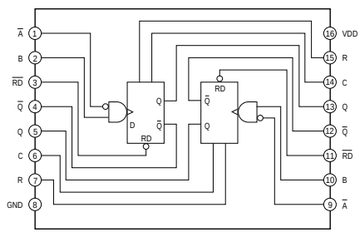


QA -B SIDE-
SUFFIX: -15

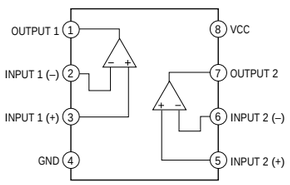
QA (AUDIO)



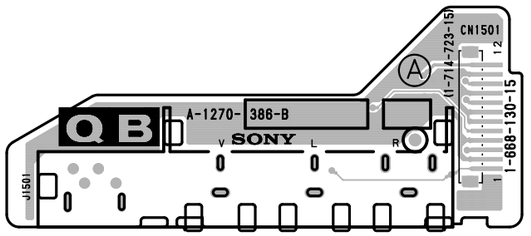
QA BOARD IC1001 PC74HC123D



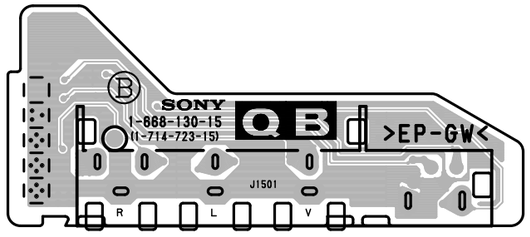
QA BOARD IC1006, 1009 LM358P



QB BOARD

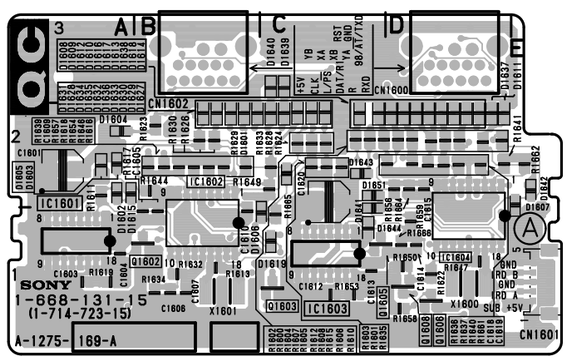


QB -A SIDE-
SUFFIX: -15

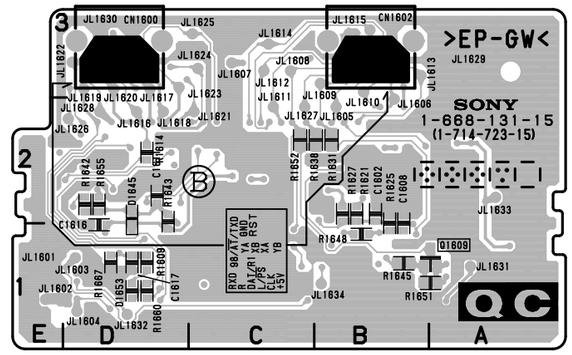


QB -B SIDE-
SUFFIX: -15

QC BOARD



QC -A SIDE-
SUFFIX: -15



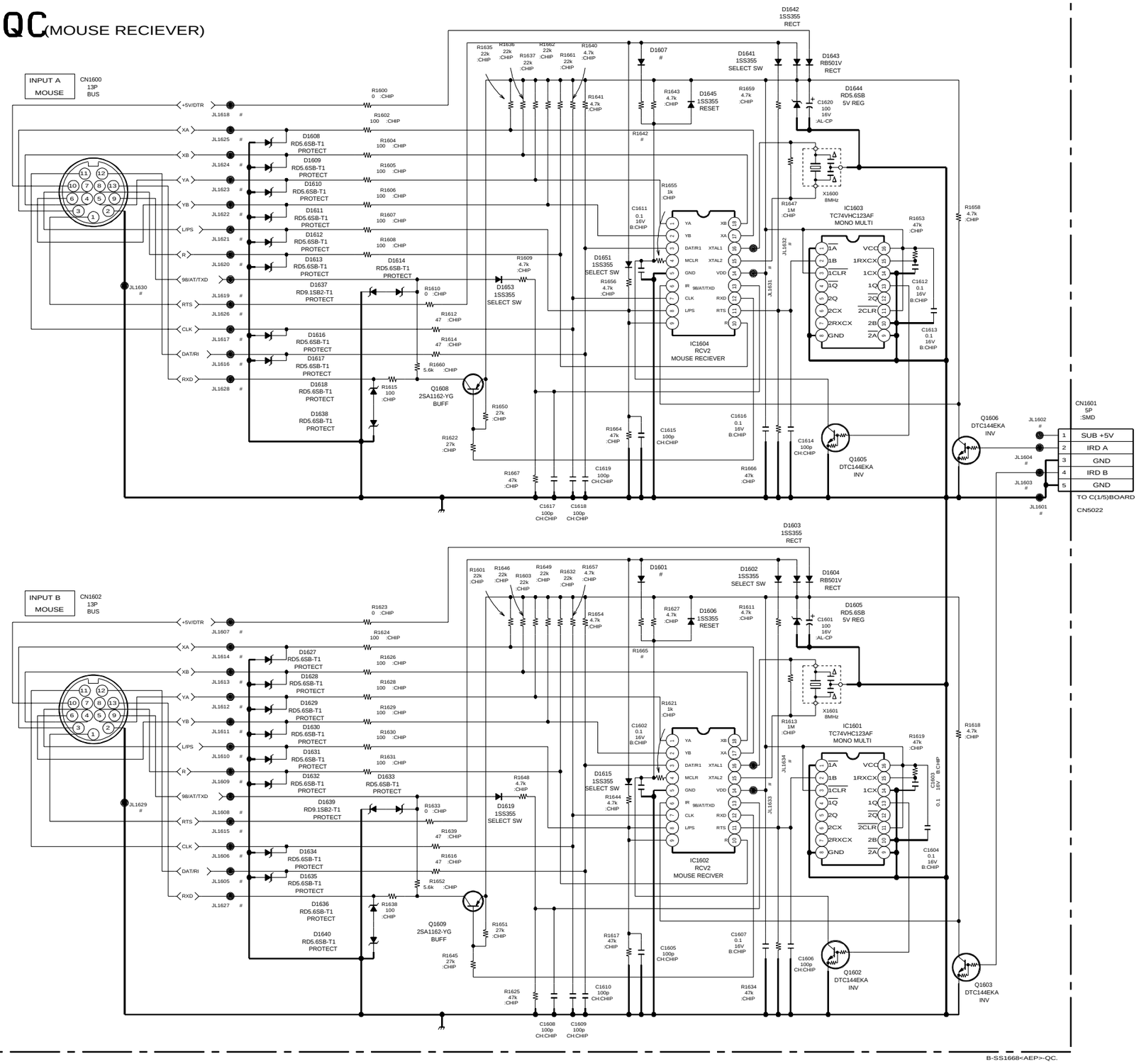
QC -B SIDE-
SUFFIX: -15

QC BOARD

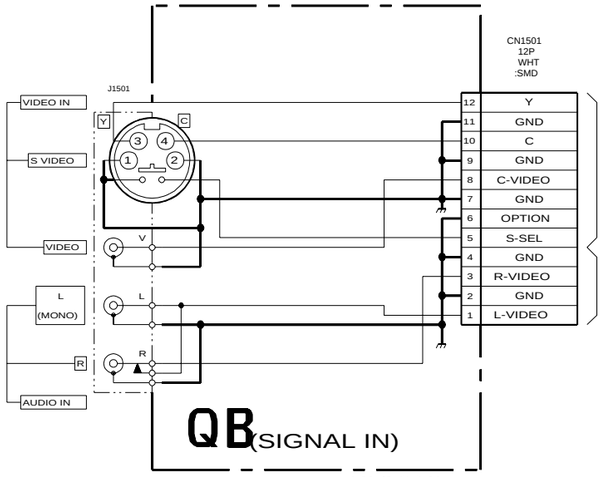
*: B SIDE

D1602	A-2	D1635	B-2
D1603	A-2	D1636	C-2
D1604	A-2	D1637	D-2
D1605	A-2	D1638	D-2
D1606	C-2	D1639	C-3
C1608	C-1	D1640	C-3
D1609	C-2	D1641	C-2
D1610	D-2	D1642	E-2
D1611	D-2	D1643	C-2
D1612	D-2	D1644	C-1
D1613	D-2	*D1645	D-2
D1614	D-2	D1651	C-2
D1615	A-2	D1653	C-2
D1616	D-2		
D1617	D-2	IC1601	A-1
D1618	D-2	IC1602	B-1
D1619	C-1	IC1603	C-1
D1627	C-2	IC1604	D-1
D1628	B-2		
D1629	C-2	Q1602	B-1
D1630	C-2	Q1603	C-1
D1631	B-2	Q1605	C-1
D1632	C-2	Q1606	D-1
D1633	C-2	Q1608	D-1
D1634	B-2	*Q1609	A-1

QC (MOUSE RECIEVER)



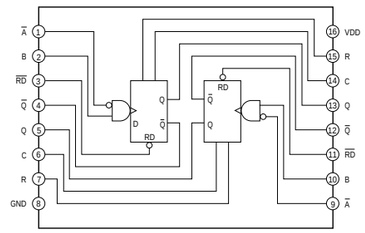
B-SS1668<AEP>-QC.



QB (SIGNAL IN)

B-SS1671<J..>-QB.

QC BOARD IC1601, 1603 TC74VHC123AF

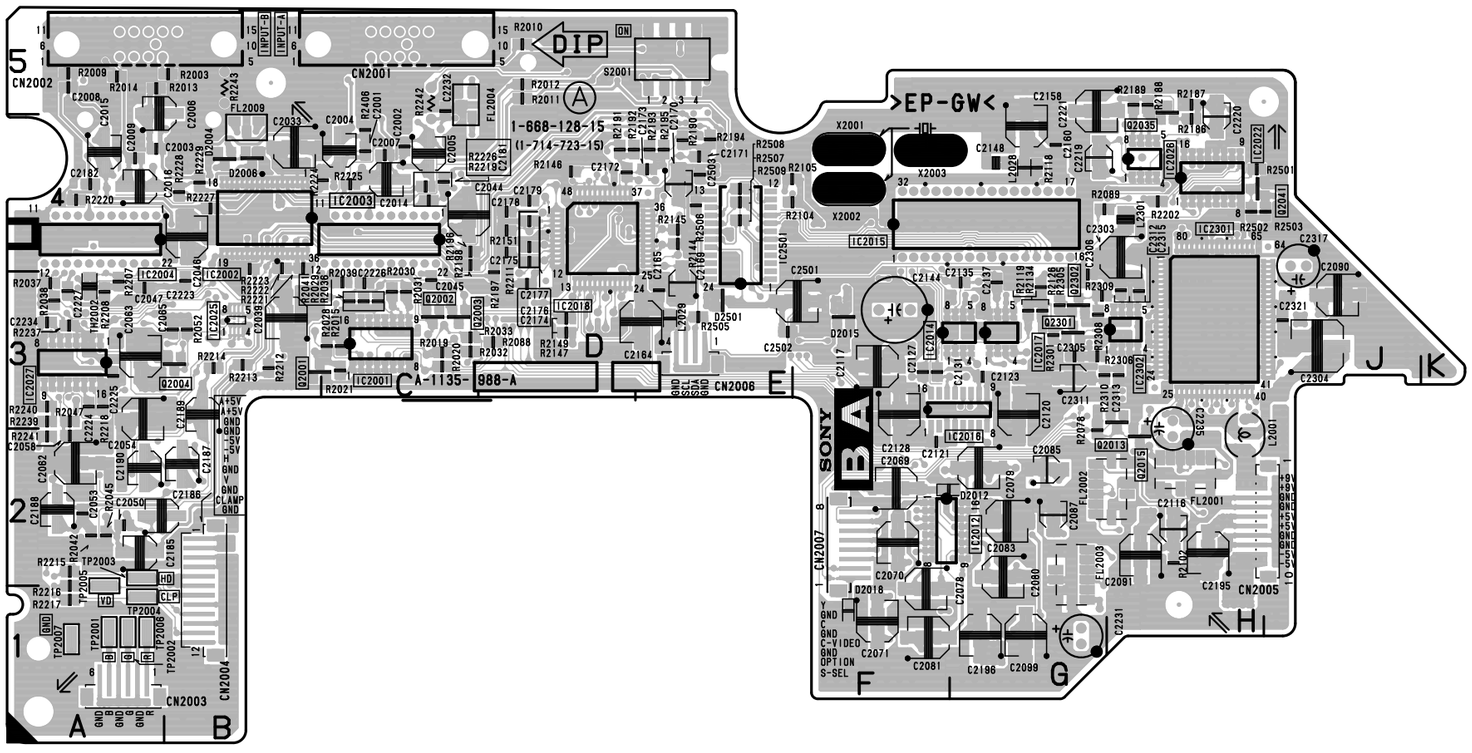


BA BOARD

BA BOARD

*: B SIDE

*D2001	C-4	*Q2006	F-2
*D2002	C-4	*Q2007	F-2
*D2003	C-4	*Q2008	G-2
D2004	B-4	*Q2009	G-2
*D2005	B-4	*Q2010	G-2
D2006	B-4	*Q2011	G-2
*D2007	D-4	*Q2012	H-2
*D2008	D-4	Q2013	H-3
*D2009	B-4	*Q2014	H-2
*D2010	B-4	Q2015	H-2
D2012	F-2	*Q2016	J-2
*D2013	F-2	*Q2017	H-2
*D2014	F-1	*Q2018	G-1
D2015	F-3	*Q2019	G-1
*D2016	C-4	*Q2020	H-2
*D2017	B-4	*Q2021	E-3
D2018	F-1	*Q2022	F-4
*D2301	H-3	*Q2023	E-3
D2501	E-3	*Q2024	G-3
		*Q2025	G-3
IC2001	C-3	*Q2026	F-3
IC2002	B-4	*Q2027	E-4
IC2003	C-4	*Q2028	E-3
IC2004	A-4	*Q2029	E-4
*IC2005	A-2	*Q2030	F-3
*IC2006	A-3	*Q2031	E-3
*IC2007	A-3	*Q2032	G-4
*IC2008	B-3	Q2035	H-5
IC2012	F-2	*Q2036	E-4
IC2014	G-3	*Q2037	E-4
IC2015	G-4	*Q2038	E-4
IC2016	G-3	*Q2039	H-4
IC2017	G-3	*Q2040	H-4
IC2018	C-4	Q2041	H-4
IC2022	H-4	Q2301	G-3
IC2025	B-3	Q2302	G-3
IC2026	H-4	*Q2303	H-3
IC2027	A-3	*Q2304	G-3
IC2301	H-3	*Q2305	H-3
IC2302	H-3		
IC2501	E-4	TP2001	A-1
		TP2002	A-1
Q2001	B-3	TP2003	A-2
Q2002	C-3	TP2004	A-1
Q2003	C-3	TP2005	A-2
Q2004	B-3	TP2006	A-1
*Q2005	F-1	TP2007	A-1



BA **-A SIDE-**
SUFFIX: -15

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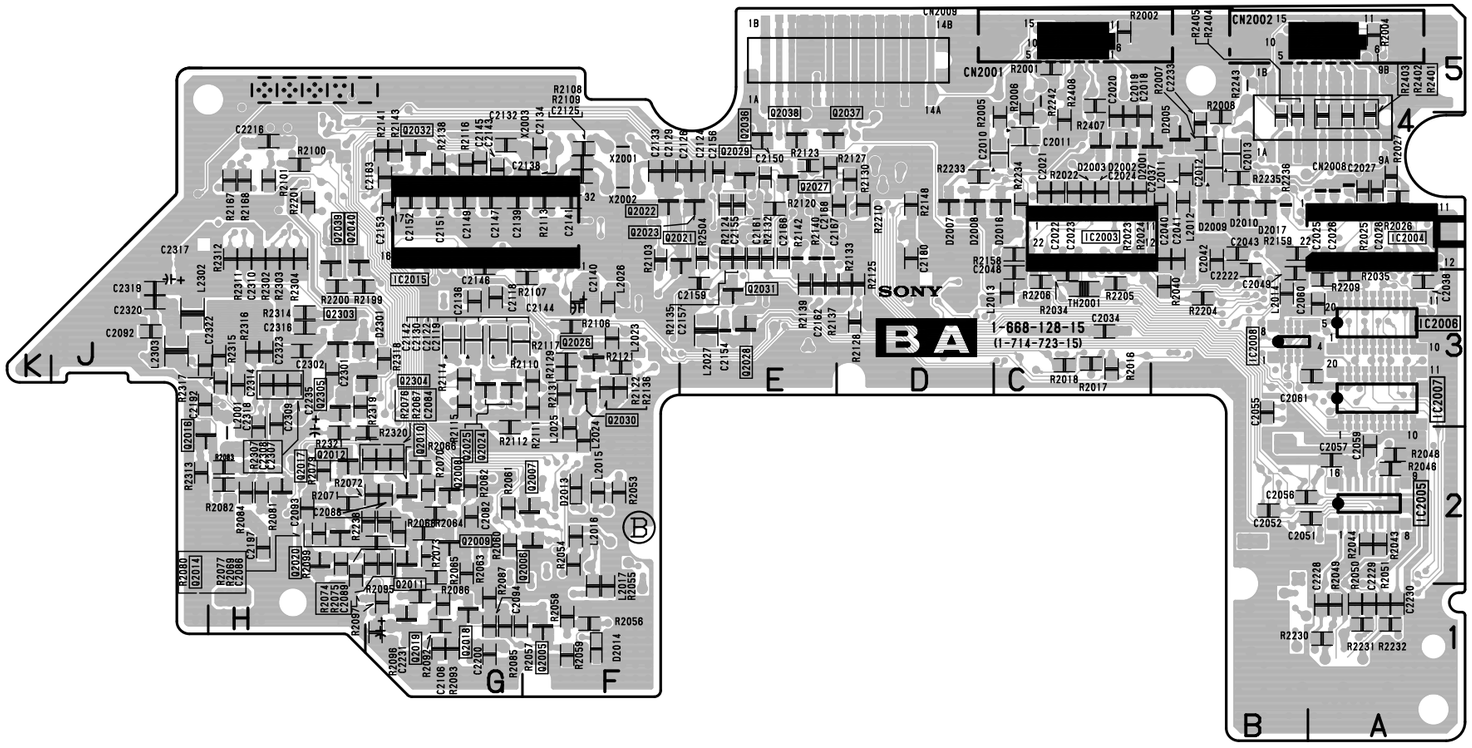
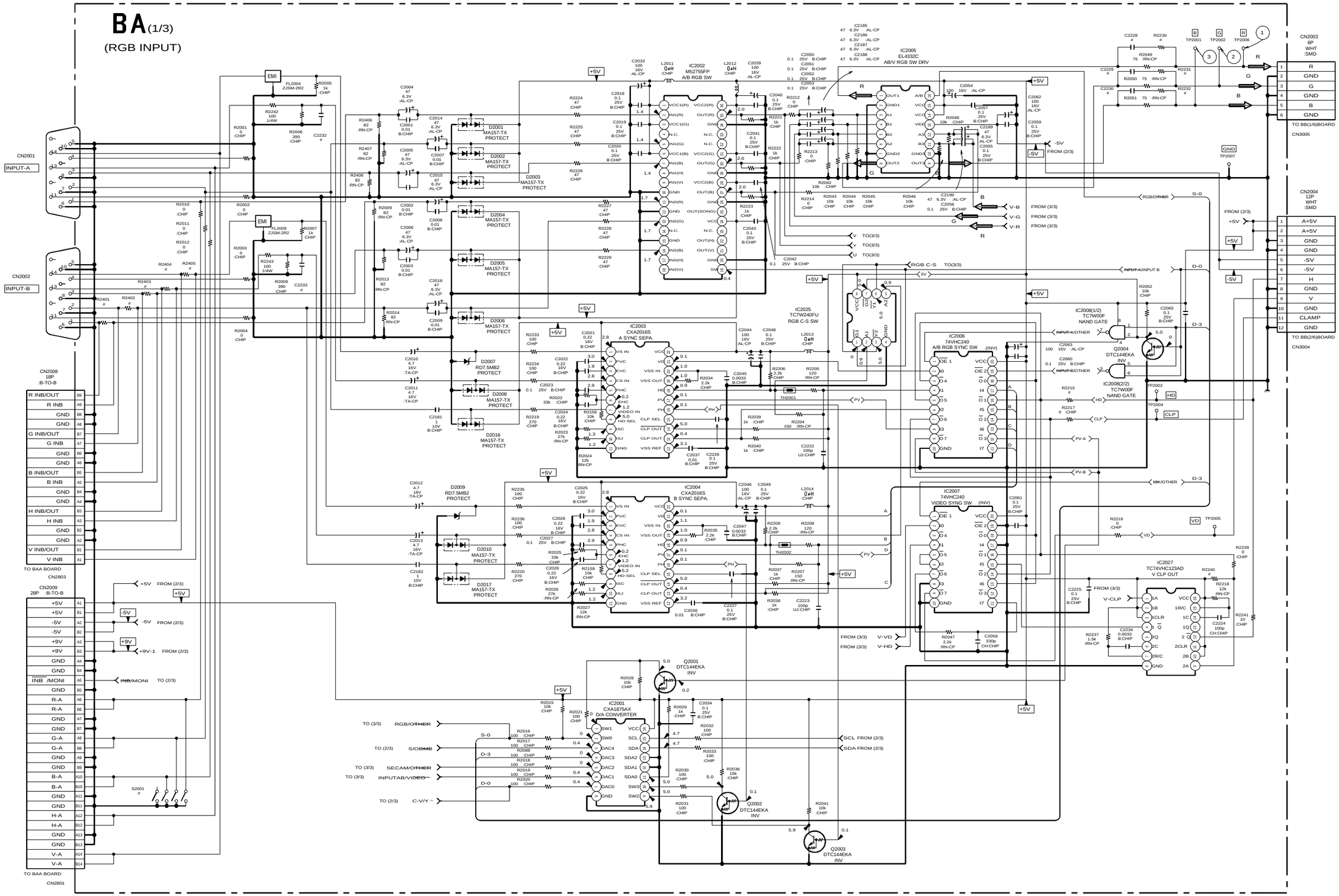
BA BOARD



BA -B SIDE-
SUFFIX: -15

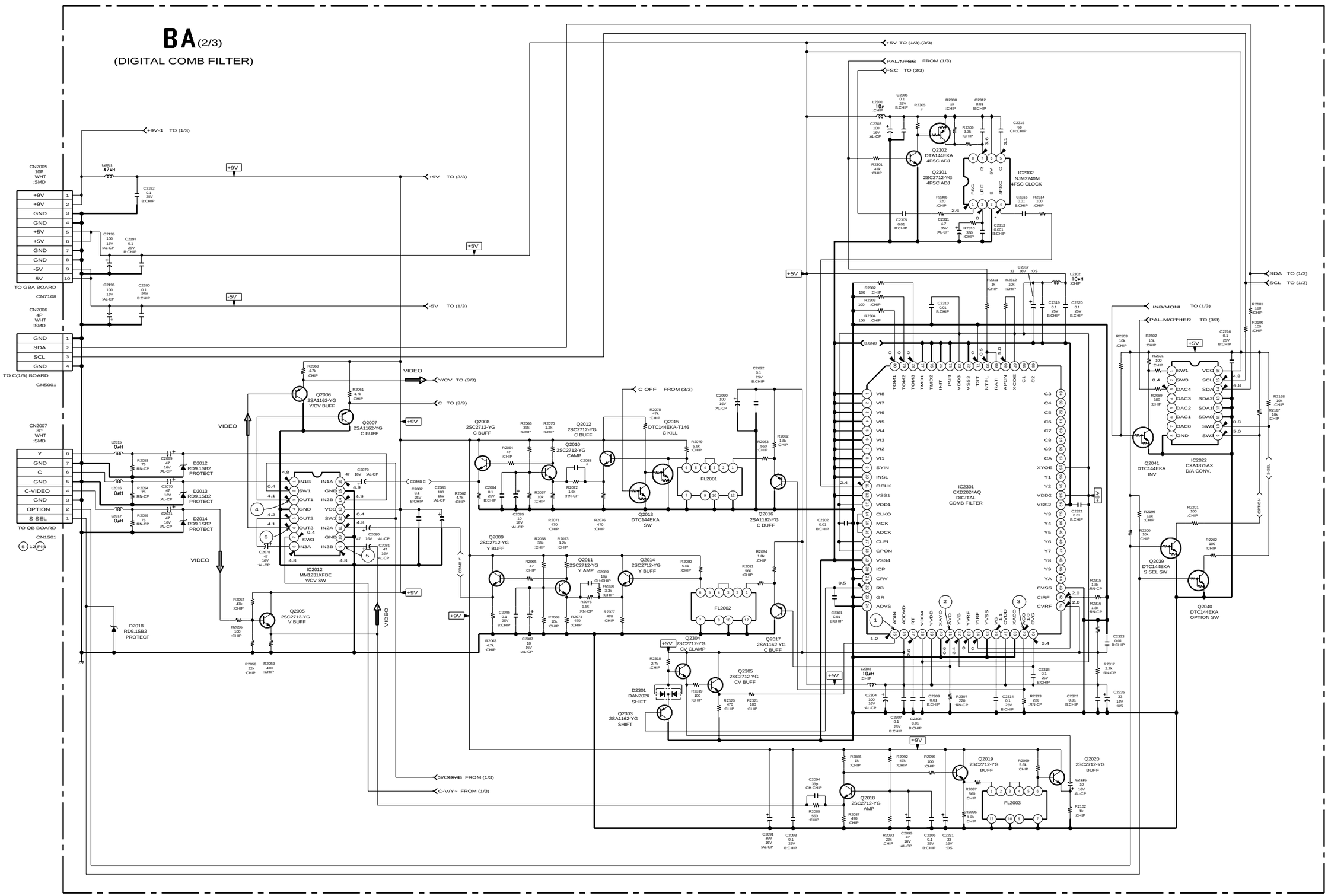
- Refer to page 8-6, 7 for PRINTED WIRING BOARD
- Refer to page 8-11 for WAVEFORMS
- Refer to page 8-11, 12 for IC BLOCK DIAGRAMS



• Refer to page 8-6, 7 for PRINTED WIRING BOARD • Refer to page 8-11 for WAVEFORMS • Refer to page 8-11, 12 for IC BLOCK DIAGRAMS

BA (2/3)

(DIGITAL COMB FILTER)

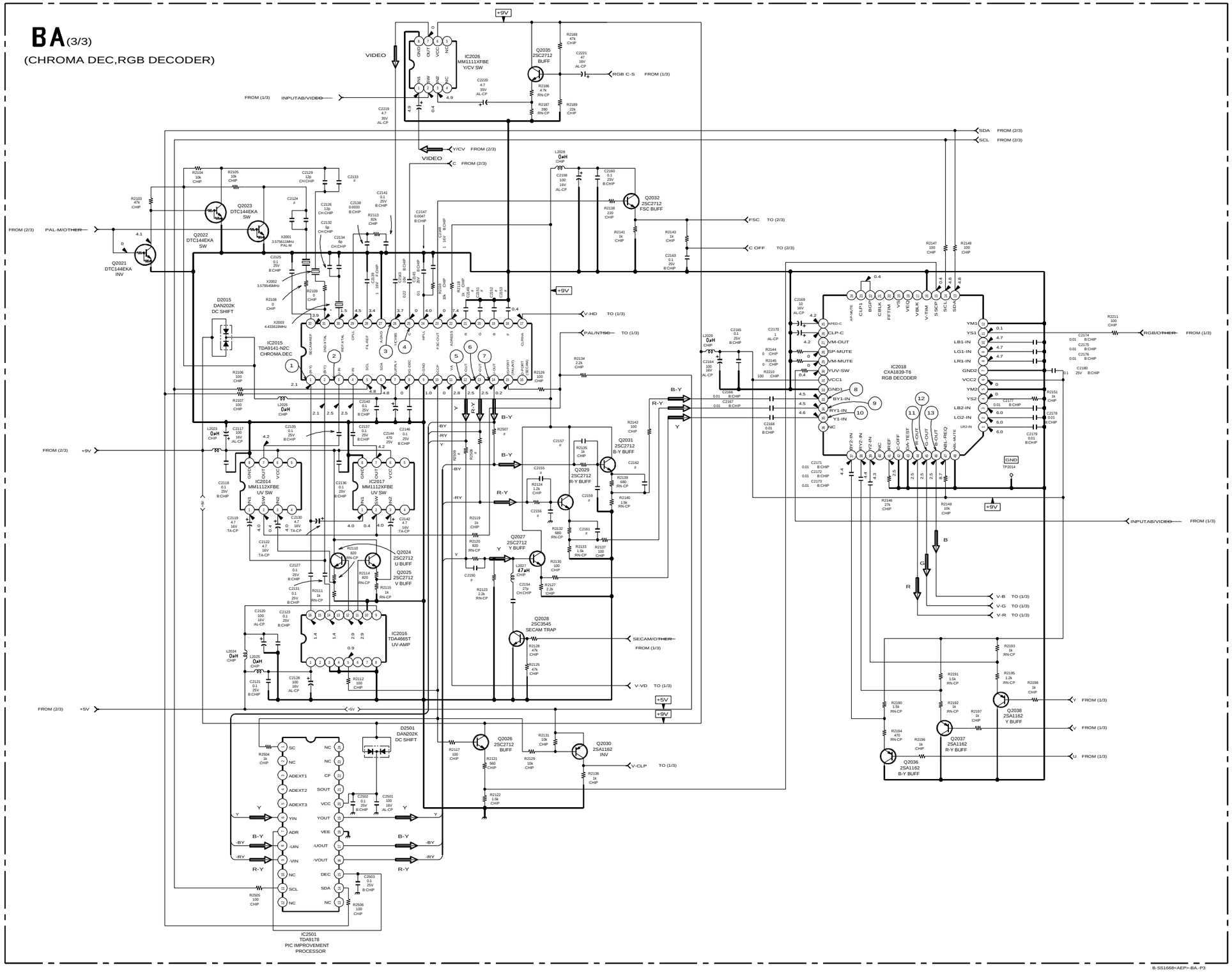


B-SS1668<AEP>-BA-P2

• Refer to page 8-6, 7 for PRINTED WIRING BOARD • Refer to page 8-11, 12 for IC BLOCK DIAGRAMS

BA (3/3)

(CHROMA DEC,RGB DECODER)



B-SS1668<AEP>-BA-P3

BA BOARD WAVEFORMS (1/3)

① 0.6Vp-p (H)	② 0.6Vp-p (H)	③ 0.6Vp-p (H)

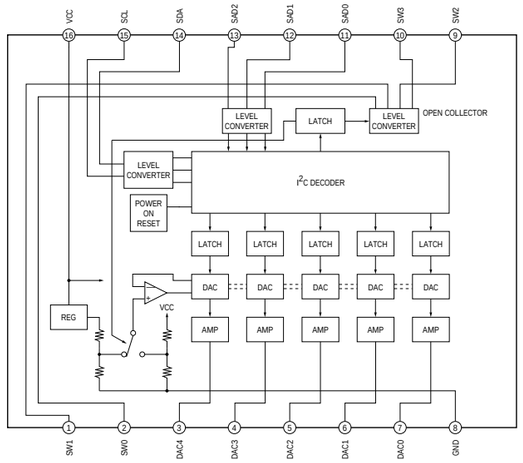
BA BOARD WAVEFORMS (2/3)

① 1.4Vp-p (H)	② 1.2Vp-p (H)	③ 1.0Vp-p (H)
④ 0.5Vp-p (H)	⑤ 1.0Vp-p (H)	⑥ 0.7Vp-p (H)

BA BOARD WAVEFORMS (3/3)

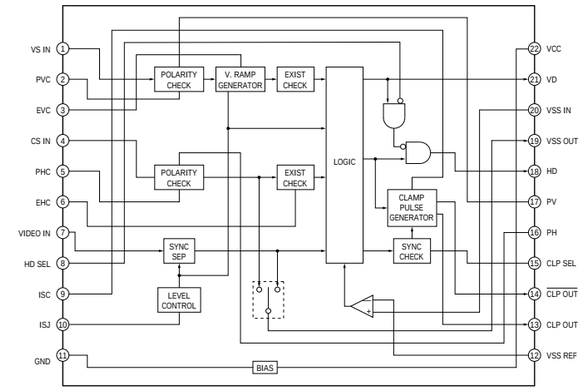
① 0.5Vp-p (H)	② 0.7Vp-p (H)	③ 0.5Vp-p (H)
④ 0.5Vp-p (H)	⑤ 1.0Vp-p (H)	⑥ 1.5Vp-p (H)
⑦ 1.0Vp-p (H)	⑧ 0.9Vp-p (H)	⑨ 0.8Vp-p (H)
⑩ 0.8Vp-p (H)	⑪ 0.6Vp-p (H)	⑫ 0.6Vp-p (H)
⑬ 0.6Vp-p (H)		

BA BOARD IC2001, 2022 CXA1875AX

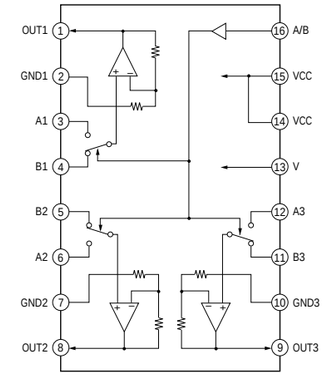


BA BOARD IC2002 M52755FP

BA BOARD IC2003, 2004 CXA2016S



BA BOARD IC2005 EL4332C



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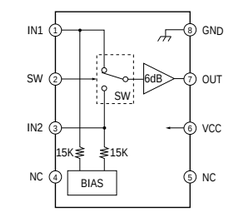
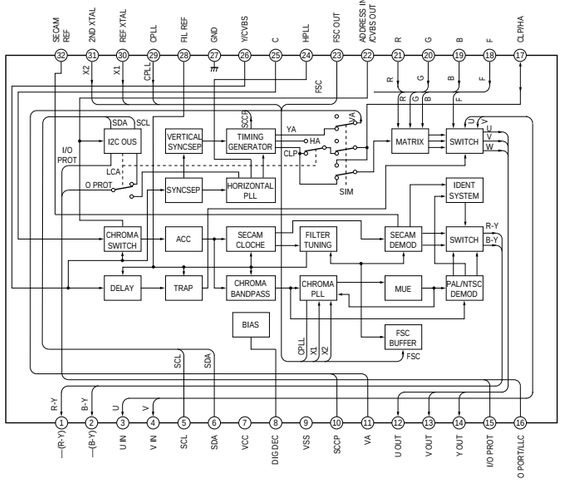


BA BOARD IC2015 TDA9141-N2C



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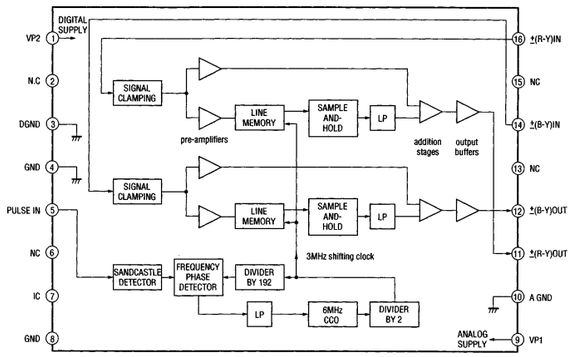

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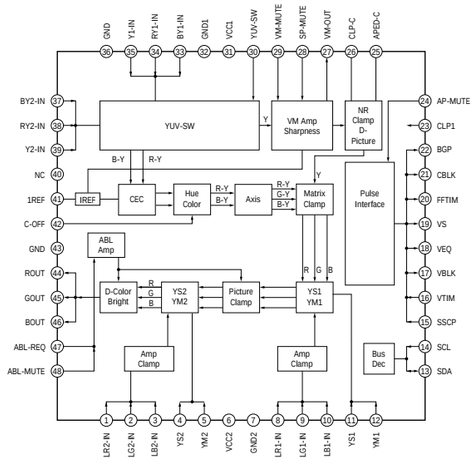
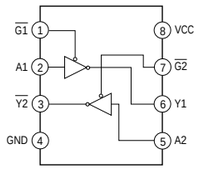


BA BOARD IC2025 TC7W240FU



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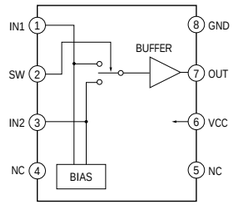

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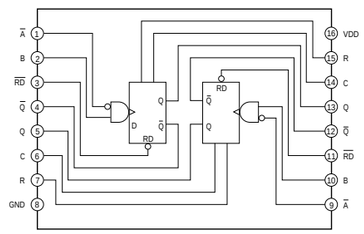
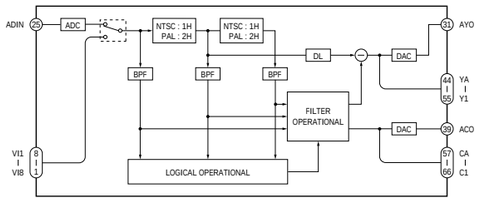
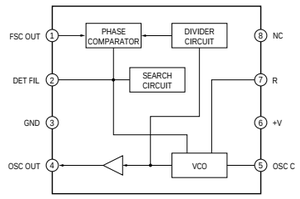
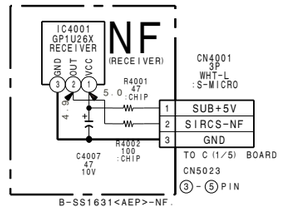


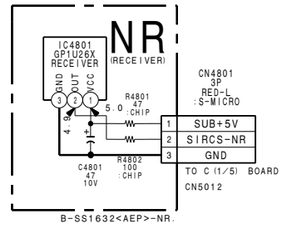
BA BOARD IC2301 CXD2024AQ

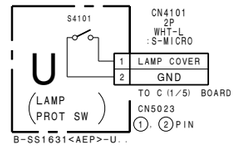


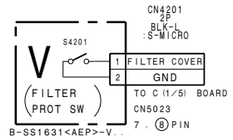
BA BOARD IC2302 NJM2240M



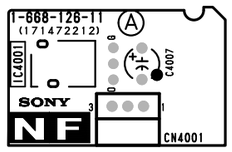




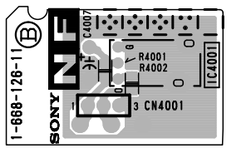




NF BOARD

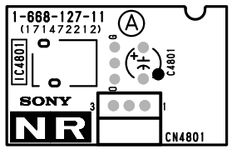


NF -A SIDE-
SUFFIX: -11

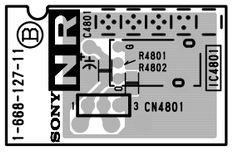


NF -B SIDE-
SUFFIX: -11

NR BOARD

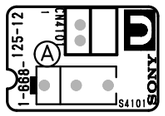


NR -A SIDE-
SUFFIX: -11

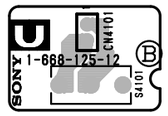


NR -B SIDE-
SUFFIX: -11

U BOARD

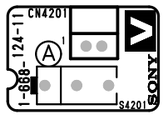


U -A SIDE-
SUFFIX: -12

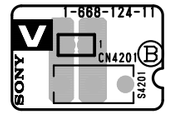


U -B SIDE-
SUFFIX: -12

V BOARD

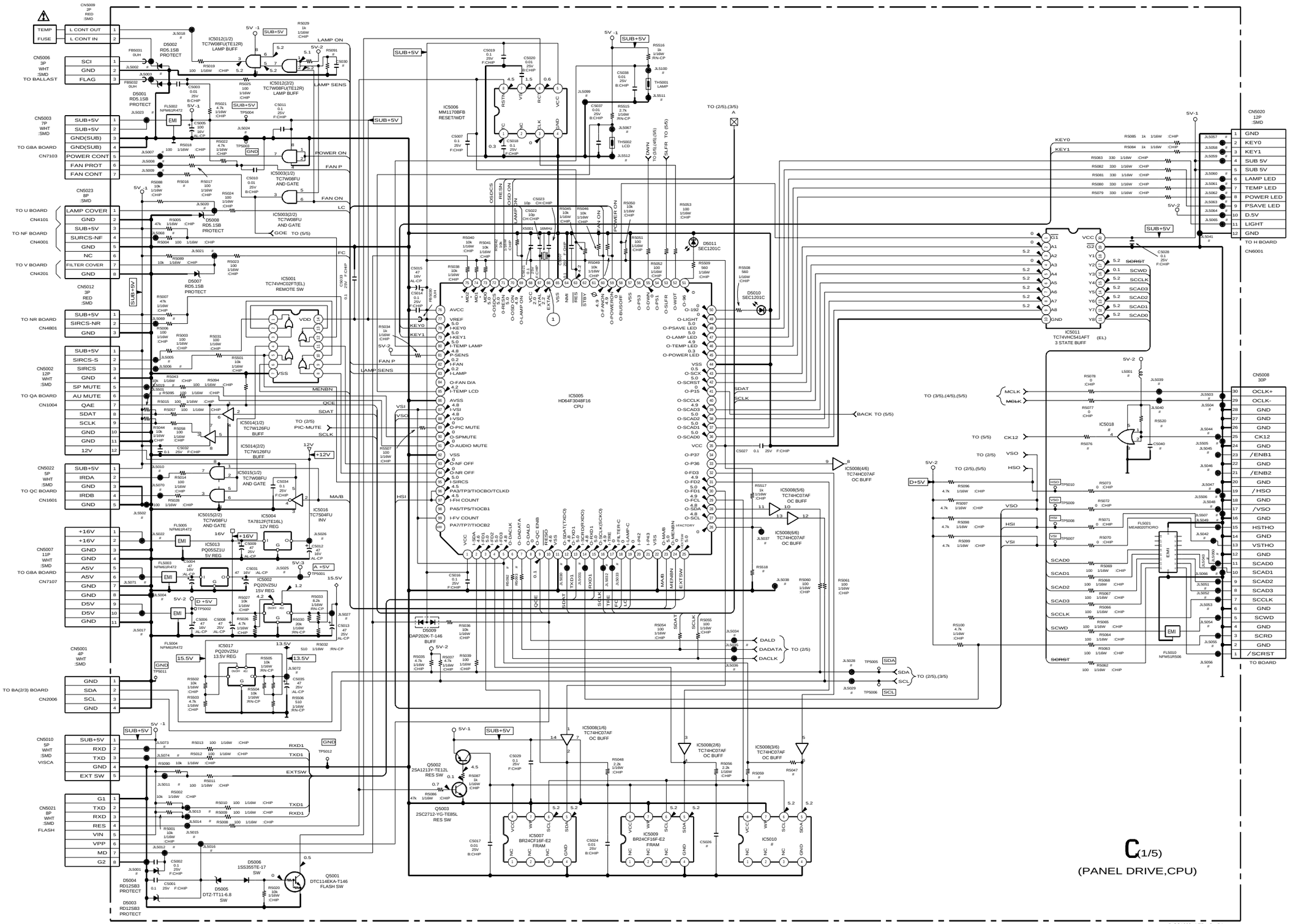


V -A SIDE-
SUFFIX: -11

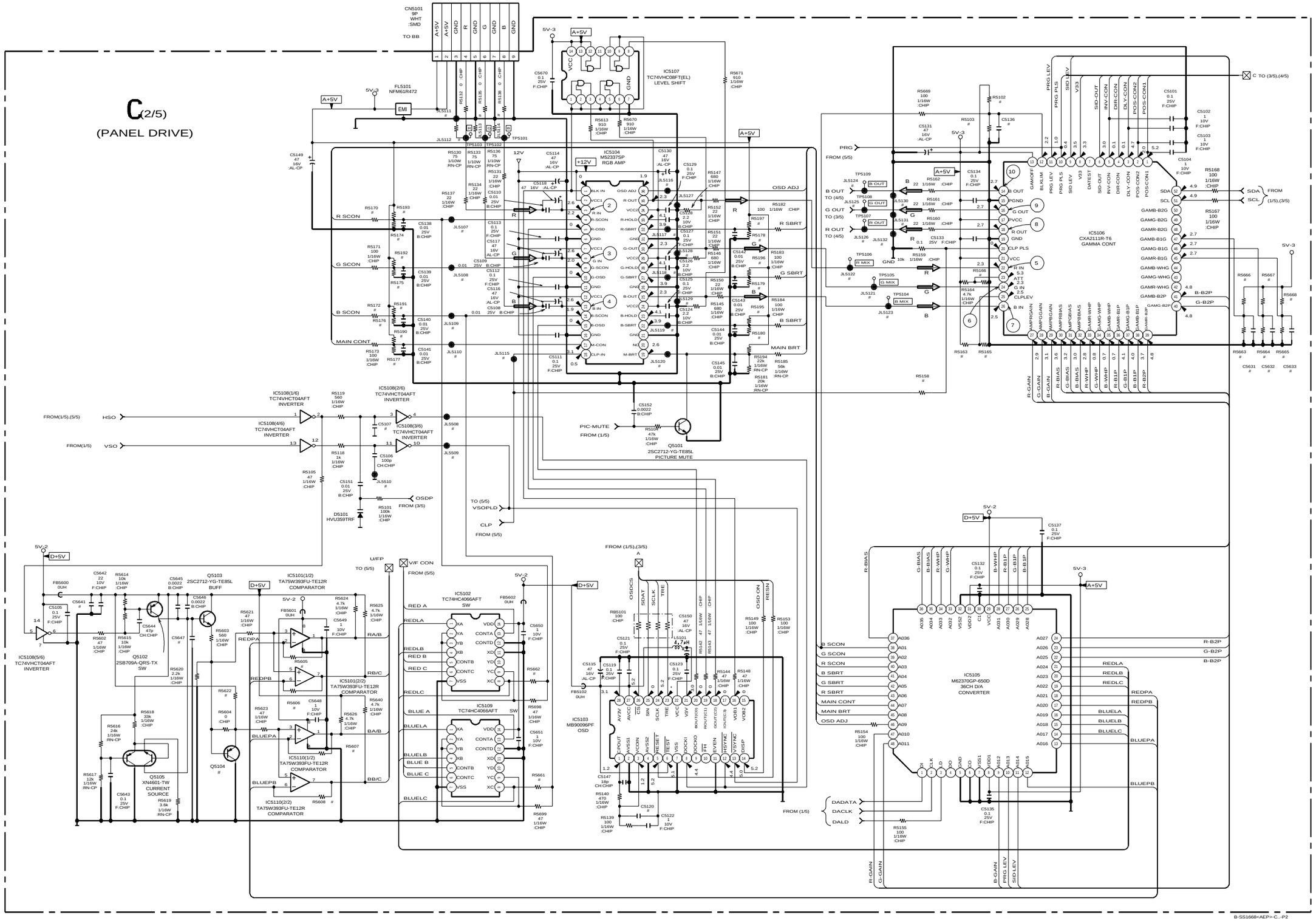


V -B SIDE-
SUFFIX: -11

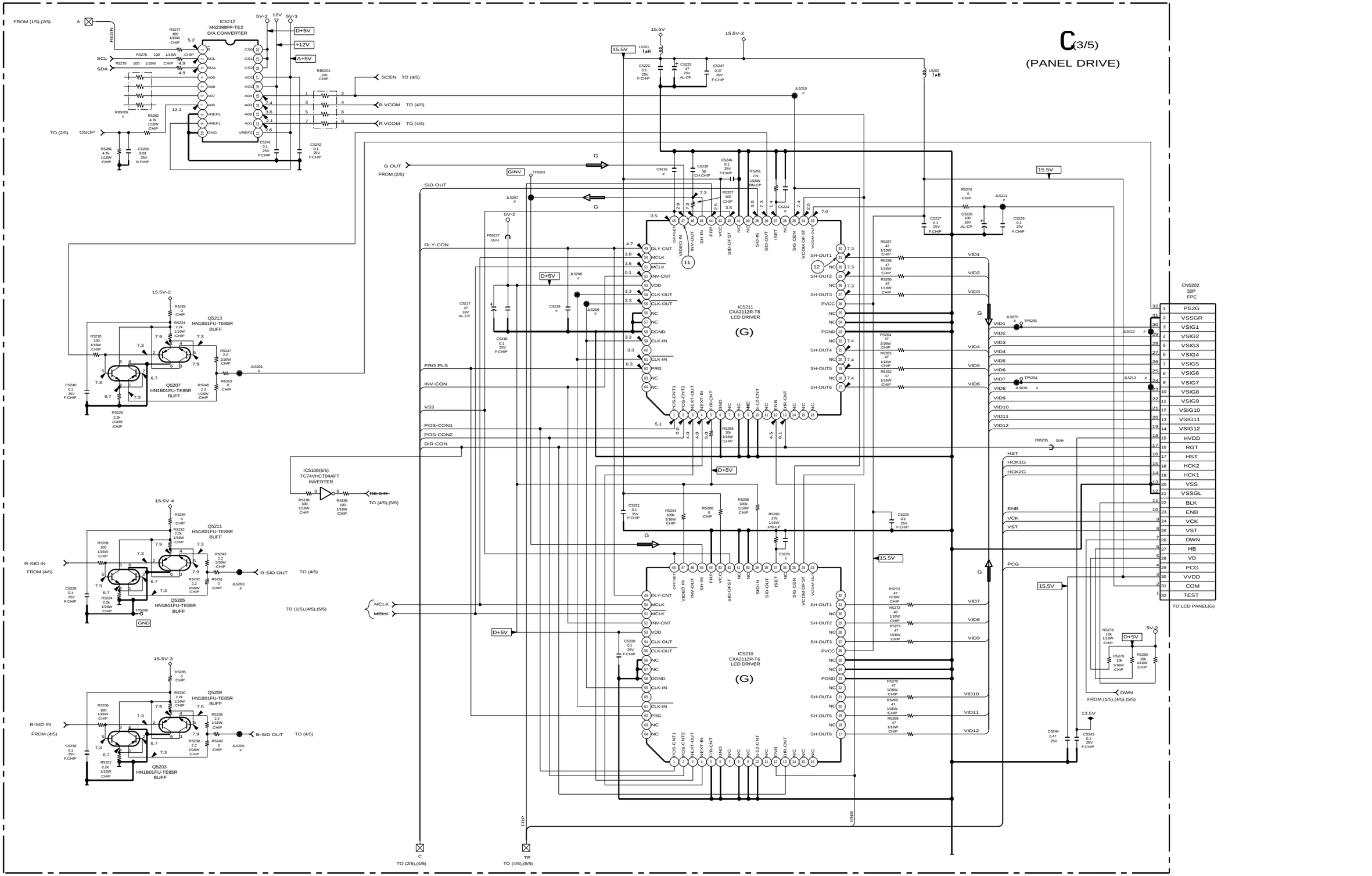
• Refer to page 8-18, 19 for PRINTED WIRING BOARD • Refer to page 8-20 for IC BLOCK DIAGRAMS



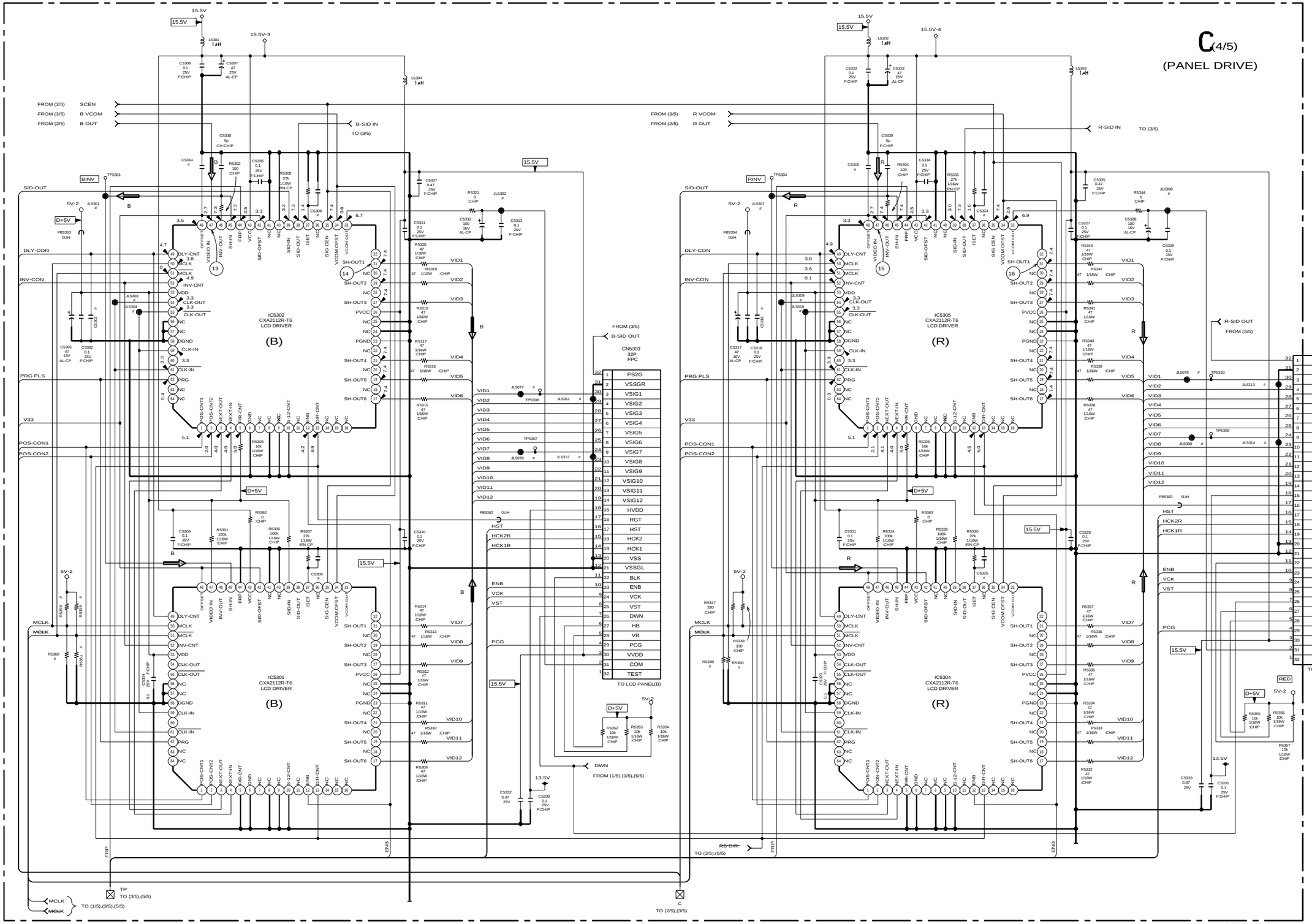
• Refer to page 8-18, 19 for PRINTED WIRING BOARD • Refer to page 8-19 for WAVEFORMS • Refer to page 8-20 for IC BLOCK DIAGRAMS



- Refer to page 8-18, 19 for PRINTED WIRING BOARD
- Refer to page 8-19 for WAVEFORMS
- Refer to page 8-20 for IC BLOCK DIAGRAMS



• Refer to page 8-18, 19 for PRINTED WIRING BOARD • Refer to page 8-19 for WAVEFORMS • Refer to page 8-20 for IC BLOCK DIAGRAMS



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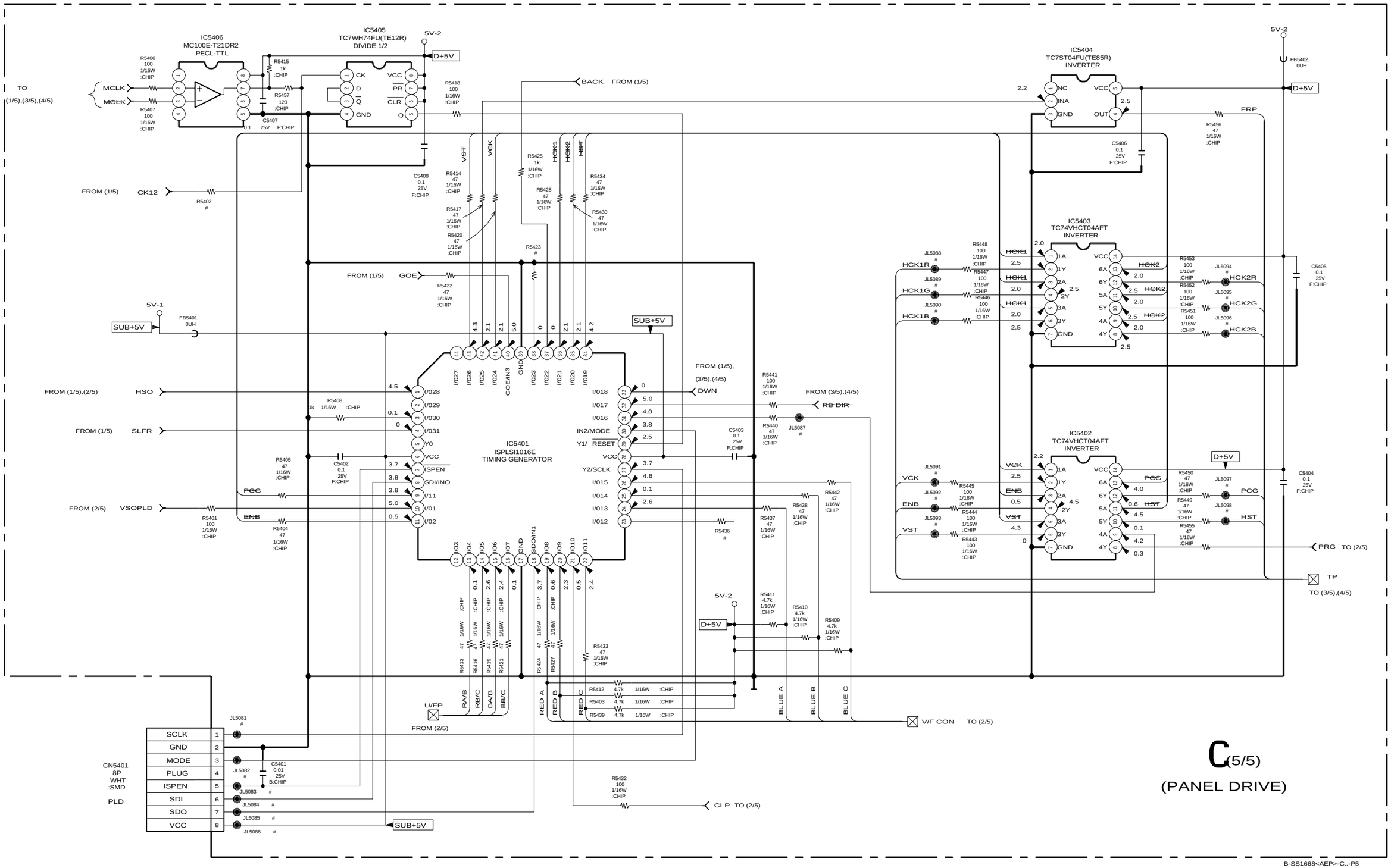
• Refer to page 8-18, 19 for PRINTED WIRING BOARD • Refer to page 8-20 for IC BLOCK DIAGRAMS



C (5/5)

(PANEL DRIVE)

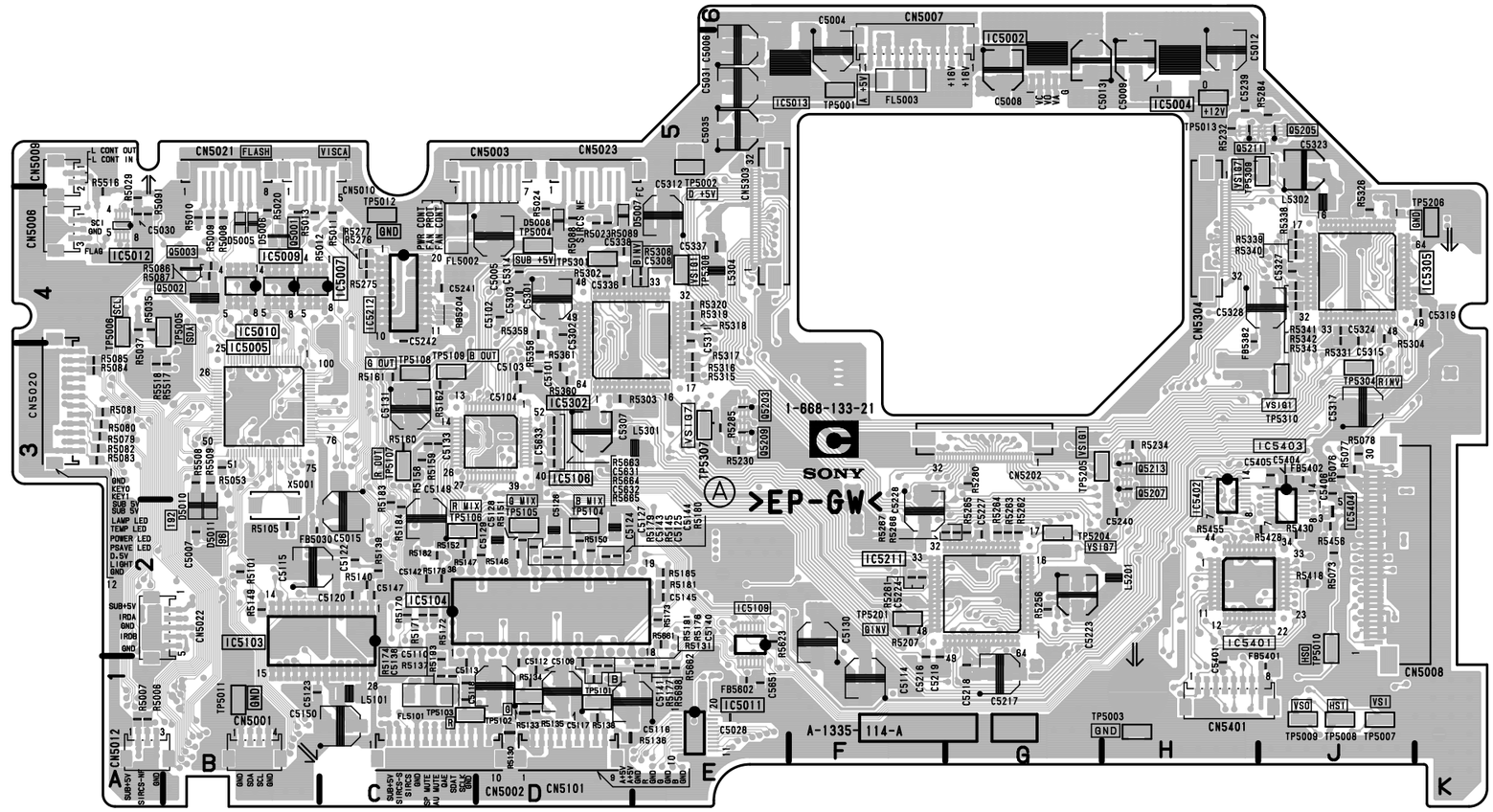
C BOARD

C BOARD

*: B SIDE

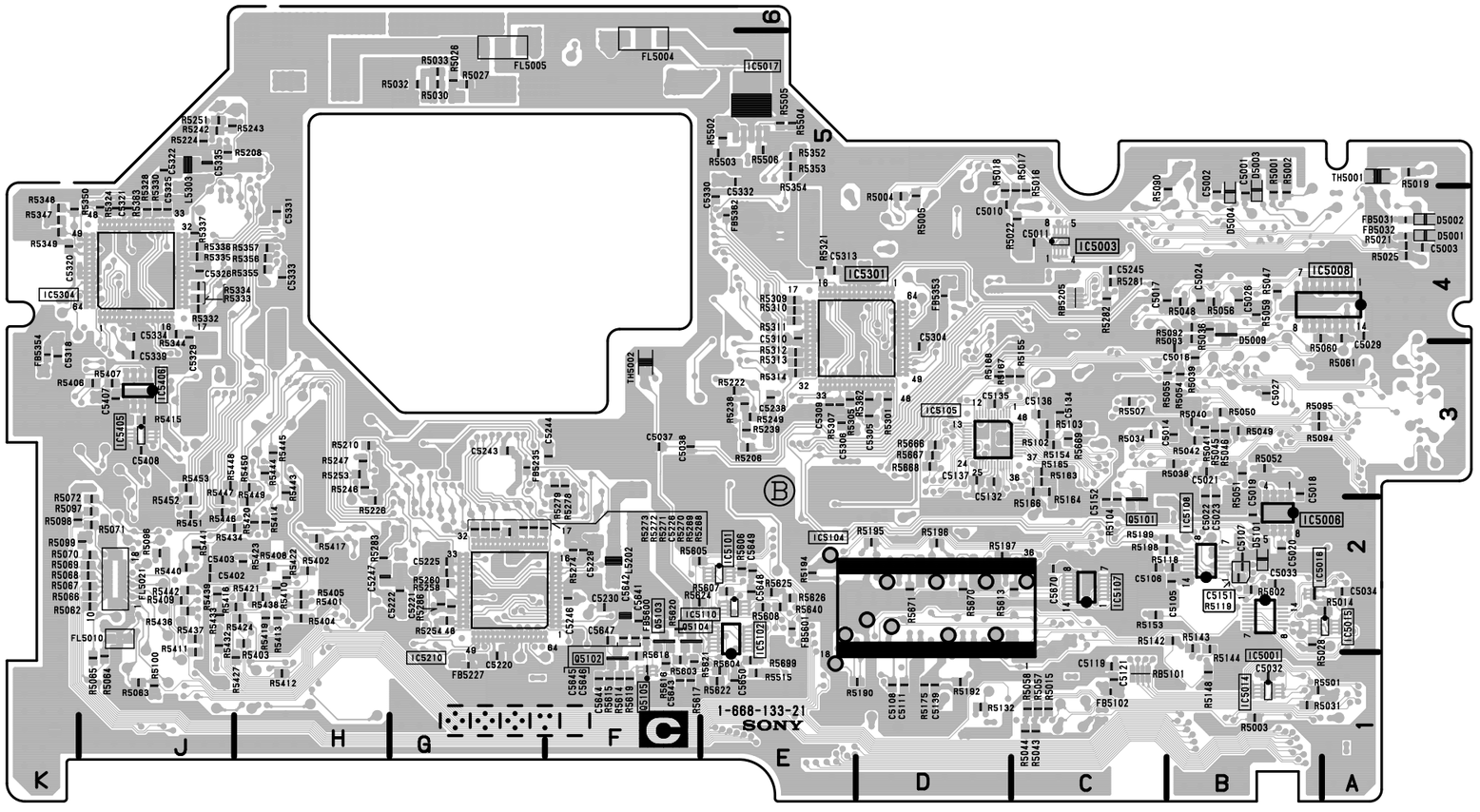
*D5001	A-4	*IC5405	J-3		
*D5002	A-4	*IC5406	J-3		
*D5003	B-4				
*D5004	B-4	Q5001	B-4		
D5005	B-4	Q5002	B-4		
D5006	B-4	Q5003	B-4		
D5007	D-4	*Q5101	C-3		
D5008	D-4	*Q5102	F-1		
*D5009	B-4	*Q5103	F-2		
D5010	B-2	*Q5105	F-1		
D5011	B-2	Q5203	E-3		
*D5101	B-2	Q5205	J-5		
		Q5207	H-3		
*IC5001	B-2	Q5209	E-3		
IC5002	G-5	Q5211	H-5		
*IC5003	C-4	Q5213	H-3		
IC5004	H-5				
IC5005	B-3	TP5001	F-5		
*IC5006	B-2	TP5002	D-5		
IC5007	B-4	TP5003	H-1		
*IC5008	A-4	TP5004	D-4		
IC5009	B-4	TP5005	B-4		
IC5011	E-1	TP5006	A-4		
IC5012	A-4	TP5007	J-1		
IC5013	F-5	TP5008	J-1		
*IC5014	B-1	TP5009	J-1		
*IC5015	A-2	TP5010	J-2		
*IC5016	B-2	TP5011	B-1		
*IC5017	E-5	TP5012	C-4		
*IC5101	E-2	TP5013	H-5		
*IC5102	E-2	TP5101	D-1		
IC5103	B-2	TP5102	D-1		
IC5104	D-2	TP5103	C-1		
*IC5105	D-3	TP5104	D-2		
IC5106	D-3	TP5105	D-2		
*IC5107	C-2	TP5106	C-2		
*IC5108	B-2	TP5107	C-3		
IC5109	E-2	TP5108	C-3		
*IC5110	E-2	TP5109	C-3		
IC5210	G-2	TP5201	F-2		
*IC5212	C-4	TP5204	G-2		
*IC5301	D-4	TP5205	G-3		
IC5302	D-4	TP5206	K-4		
IC5304	J-2	TP5301	D-4		
IC5305	J-4	TP5304	J-3		
IC5401	H-2	TP5307	E-3		
IC5402	H-3	TP5308	E-4		
IC5403	J-2	TP5310	J-3		
IC5404	J-2				

C BOARD



C -A SIDE-
SUFFIX: -21

C BOARD



C -B SIDE-
SUFFIX: -21

C BOARD WAVEFORMS (2/5)

② 620mVp-p (H)

③ 620mVp-p (H)

④ 640mV

⑤ 1.1Vp-p (H)

⑥ 1.0Vp-p (H)

⑦ 1.0Vp-p (H)

⑧ 1.1Vp-p (H)

⑨ 1.1Vp-p (H)

⑩ 1.1Vp-p (H)

C BOARD WAVEFORMS (3/5)

⑪ 1.1Vp-p (H)

⑫ 8.6Vp-p (H)

C BOARD WAVEFORMS (4/5)

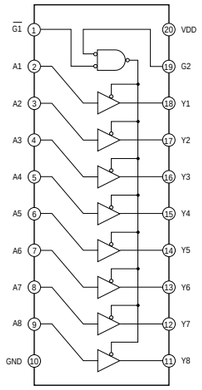
⑬ 1.0Vp-p (H)

⑭ 9.0Vp-p (H)

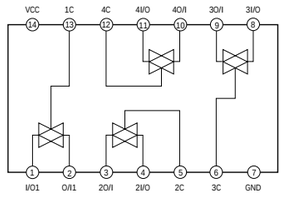
⑮ 1.0Vp-p (H)

⑯ 8.7Vp-p (H)

C BOARD IC5011 TC74VHC541FT



C BOARD IC5102, 5109 TC74HC4066AFT



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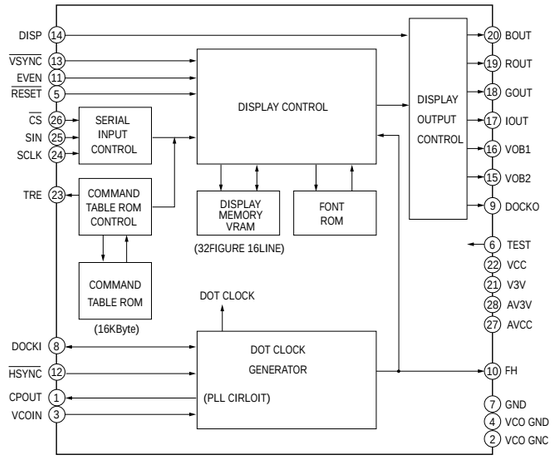

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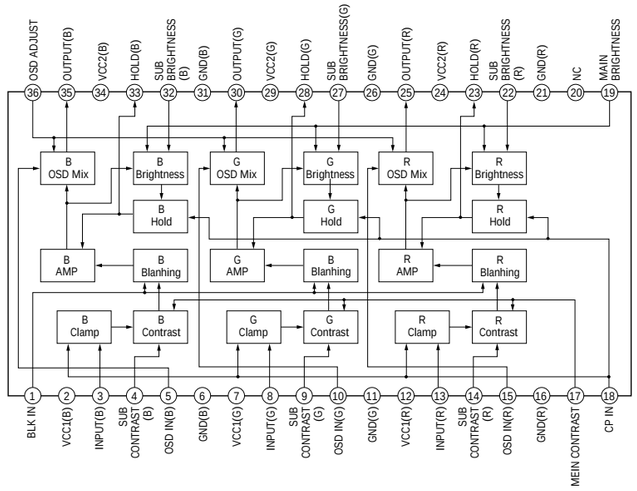

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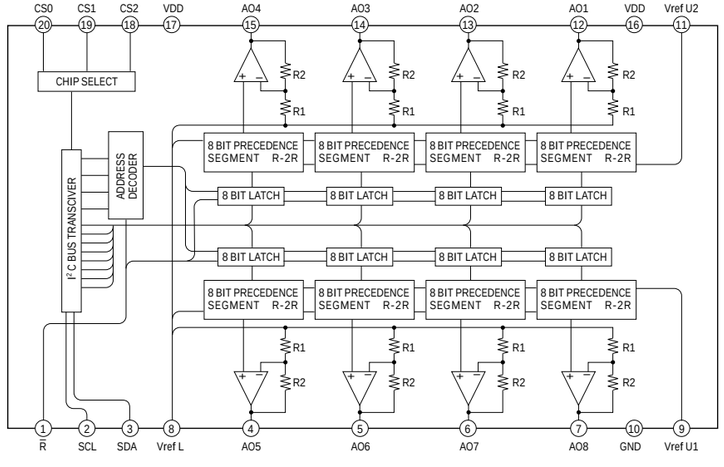

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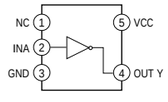
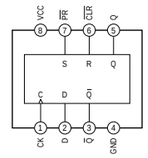
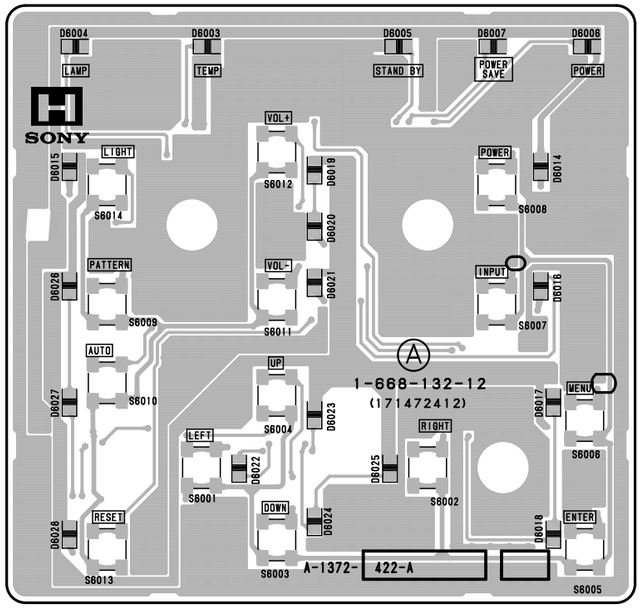


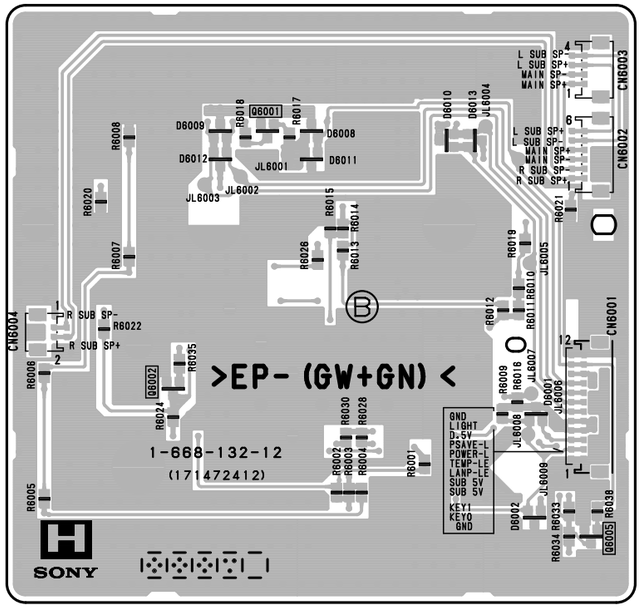
C BOARD IC5405 TC7WH74FU



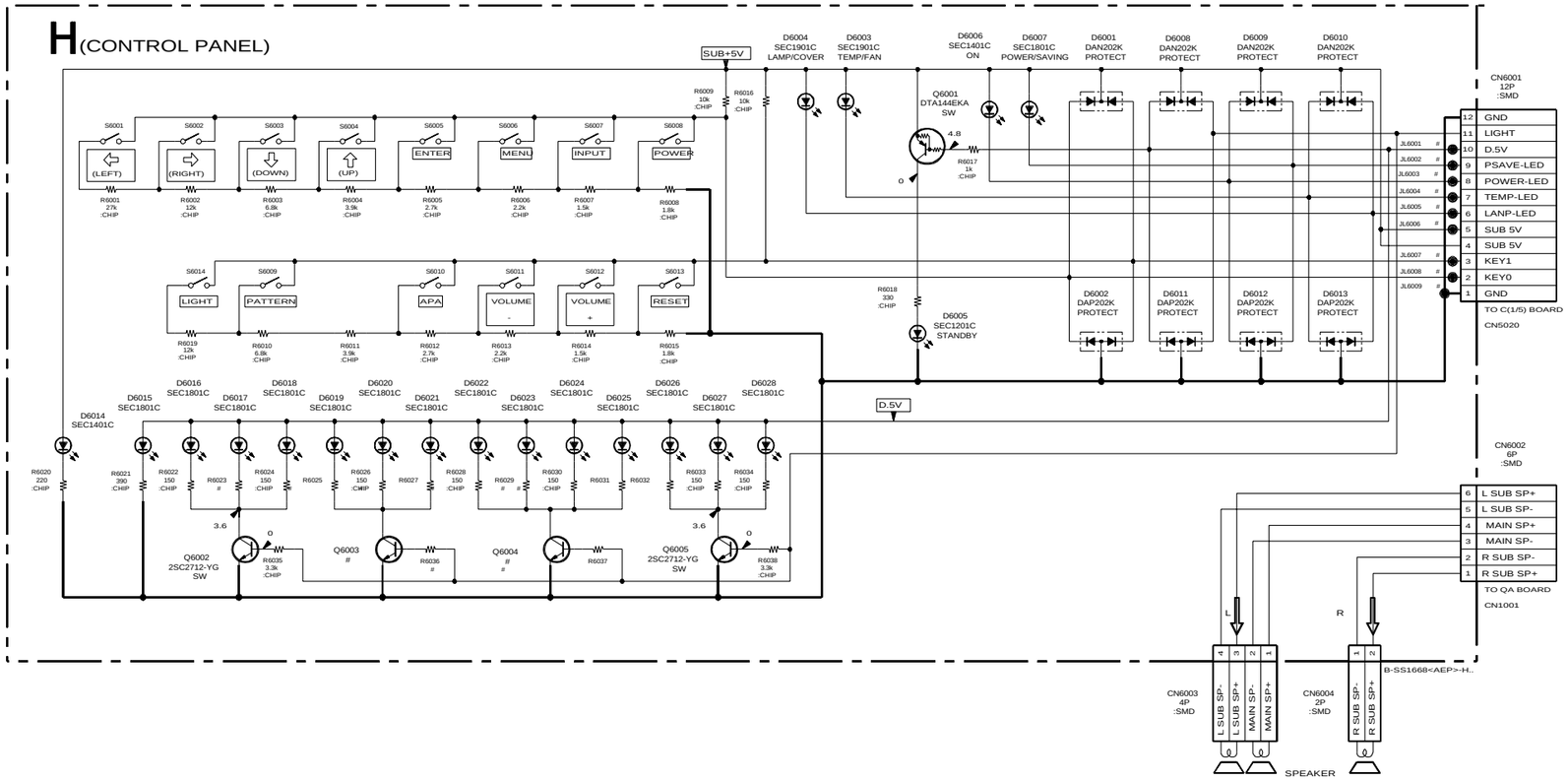
H BOARD



H -A SIDE-
SUFFIX: -12



H -B SIDE-
SUFFIX: -12



BAA BOARD

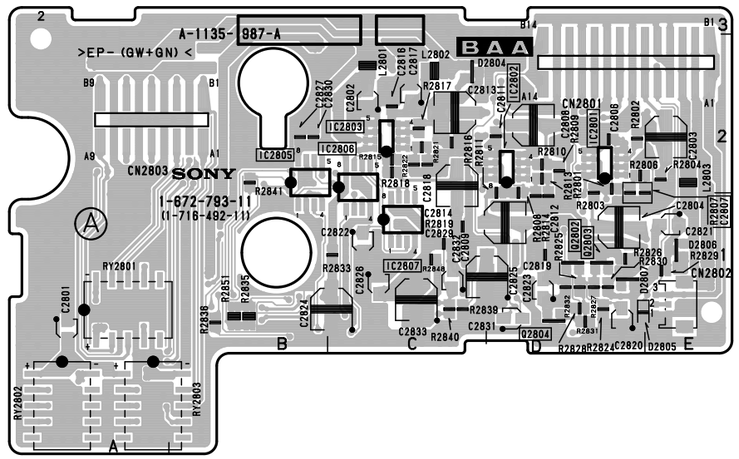
*: B SIDE

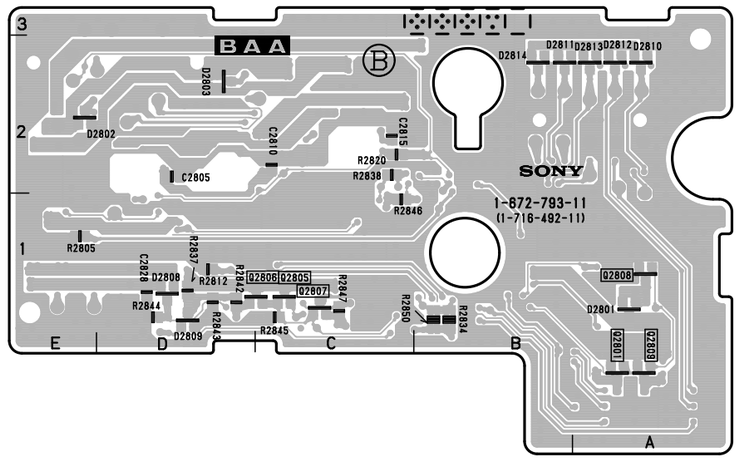
*D2801 A-1
*D2802 E-2
*D2803 D-2
D2804 C-2
D2805 D-1
D2806 E-1
D2807 D-1
*D2808 D-1
*D2809 D-1
*D2810 A-2
*D2811 B-2
*D2812 A-2
*D2813 A-2
*D2814 B-2

IC2801 D-2
IC2802 D-2
IC2803 C-2
IC2805 B-2
IC2806 C-2
IC2807 C-1

*Q2801 A-1
Q2802 D-1
Q2803 D-1
Q2804 D-1
*Q2805 C-1
*Q2806 C-1
*Q2807 C-1
*Q2808 A-1
*Q2809 A-1

BAA BOARD

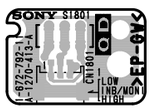


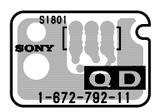


BAA -A SIDE-
SUFFIX: -11

BAA -B SIDE-
SUFFIX: -11

QD BOARD



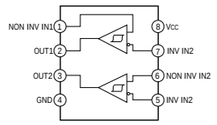


QD -A SIDE-
SUFFIX: -11

QD -B SIDE-
SUFFIX: -11

BAA (RGB DRIVE)

BAA BOARD
IC2806 SN75157



CN2801 28P :B-TO-B

+5V	A1	
+5V	B1	
-5V	A2	
-5V	B2	
+9V	A3	
+9V	B3	
GND	A4	
GND	B4	
INB /MONI	A5	
GND	B5	
R-A	A6	
R-A	B6	
GND	A7	
GND	B7	
G-A	A8	
G-A	B8	
GND	A9	
GND	B9	
B-A	A10	
B-A	B10	
GND	A11	
GND	B11	
H-A	A12	
H-A	B12	
GND	A13	
GND	B13	
V-A	A14	
V-A	B14	

TO BA(1/3)BOARD
CN2801

CN2803 18P :B-TO-B

B9	R INB/OUT
A9	R INB
B8	GND
A8	GND
B7	G INB/OUT
A7	G INB
B6	GND
A6	GND
B5	B INB/OUT
A5	B INB
B4	GND
A4	GND
B3	H INB/OUT
A3	H INB
B2	GND
A2	GND
B1	V INB/OUT
A1	V INB

TO BA(1/3)BOARD
CN2008

IC2801 MAX4223ESA R DRIVE
IC2802 MAX4223ESA G DRIVE
IC2803 MAX4223ESA B DRIVE
IC2807(2/2) TL082CPS BUFF
IC2807(1/2) TL082CPS BUFF
IC2806 SN75157 COMPARATOR
IC2805 SN75453BPS BUFF

D2801 DAN202K PROTECT
D2802 MA157-TX PROTECT
D2803 MA157-TX PROTECT
D2804 MA157-TX PROTECT
D2805 RD9.1SB2-T1 PROTECT
D2806 MA157-TX PROTECT
D2807 DAN202K PROTECT
D2808 MA157-TX PROTECT
D2809 DAN202K PROTECT
D2810 MA157-TX PROTECT
D2811 MA157-TX PROTECT
D2812 MA157-TX PROTECT
D2813 MA157-TX PROTECT
D2814 MA157-TX PROTECT

Q2801 DTC114EKA SW
Q2802 2SC2712-YG PEAK-HOLD
Q2803 2SC2712 BUFF
Q2804 2SA1162-YG PEAK-HOLD
Q2805 2SC2712-YG PEAK-HOLD
Q2806 2SC2712 BUFF
Q2807 2SA1162-YG PEAK-HOLD
Q2808 DTC114EKA SW
Q2809 DTC114EKA SW

RY2801
RY2802
RY2803

IN/OUT
S1801 (RGB IN/OUT)

CN1801 3P RED :SMD

3	HIGH	HIGH	3
2	INB/ MONI	INB/ MONI	2
1	LOW	LOW	1

CN2802 3P RED :SMD

QD
(RGB SW)

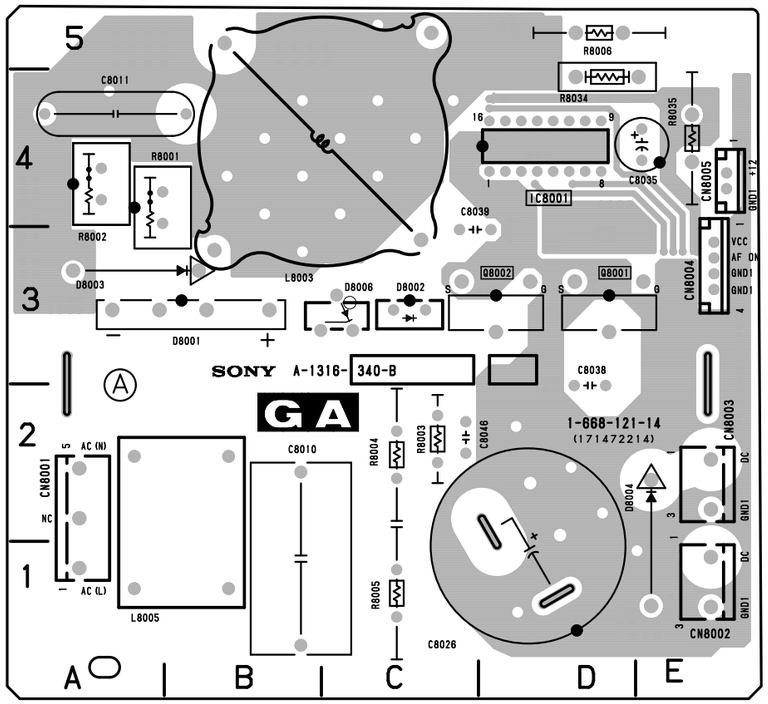
B-SS1668<AEP>-BAA

GA BOARD

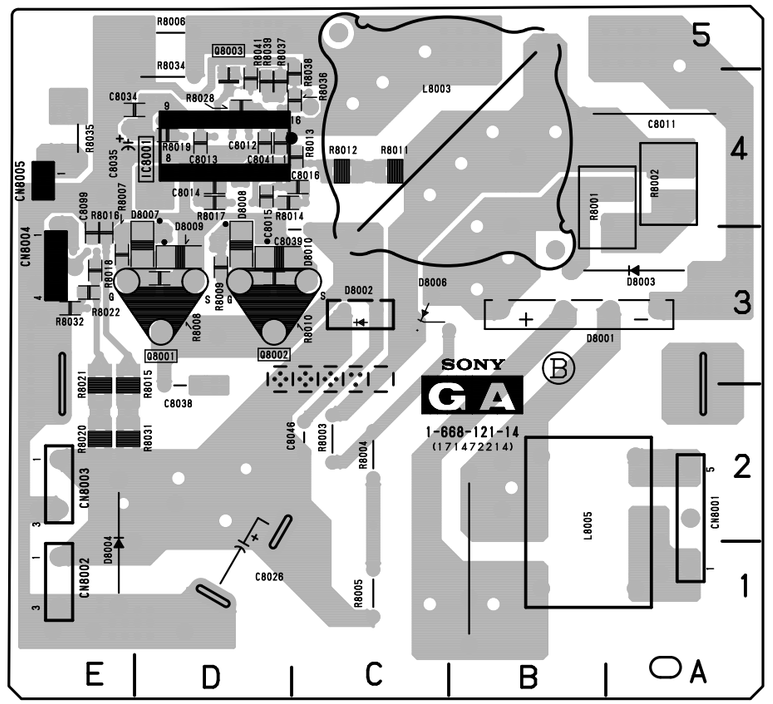
*: B SIDE

D8001	B-3
D8002	C-3
D8003	B-3
D8004	E-2
*D8006	C-3
*D8007	D-3
*D8008	D-3
*D8009	D-3
*D8010	C-3
IC8001	D-4
Q8001	D-3
Q8002	D-3
*Q8003	D-4

GA BOARD

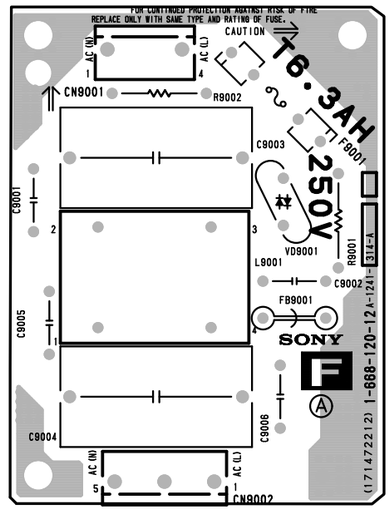


GA -A SIDE-
SUFFIX: -14

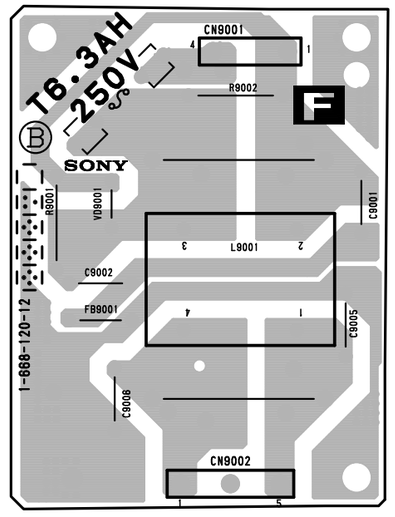


GA -B SIDE-
SUFFIX: -14

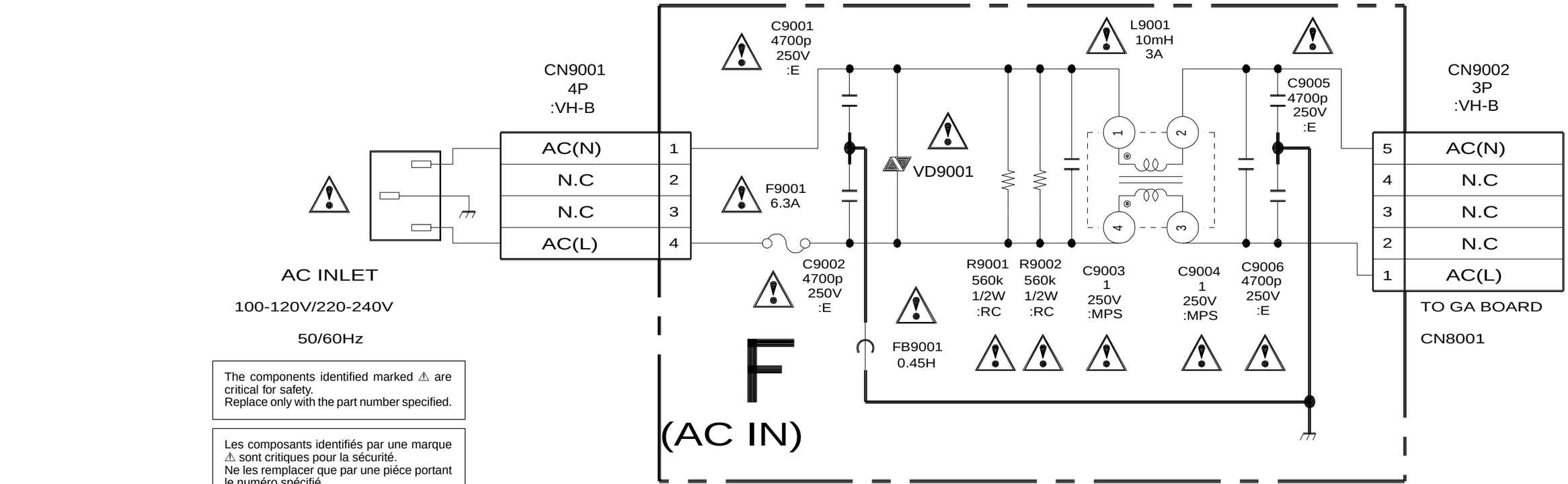
F BOARD

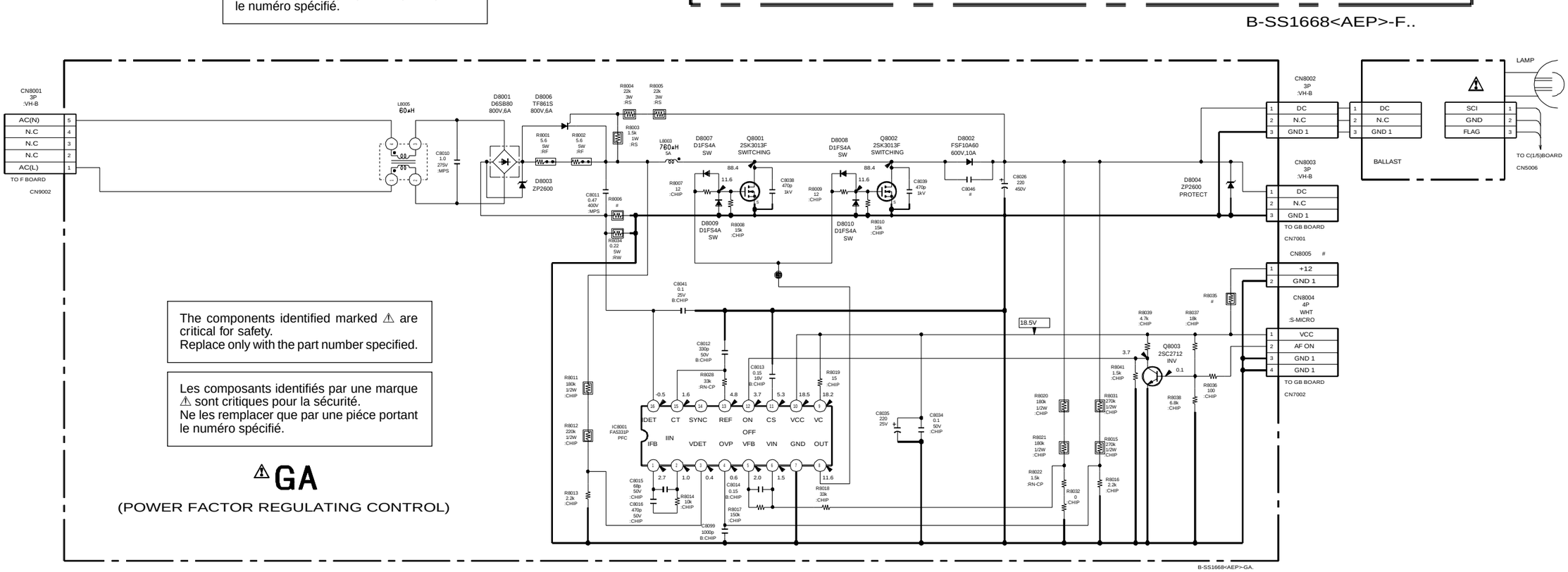


F -A SIDE-
SUFFIX: -12



F -B SIDE-
SUFFIX: -12

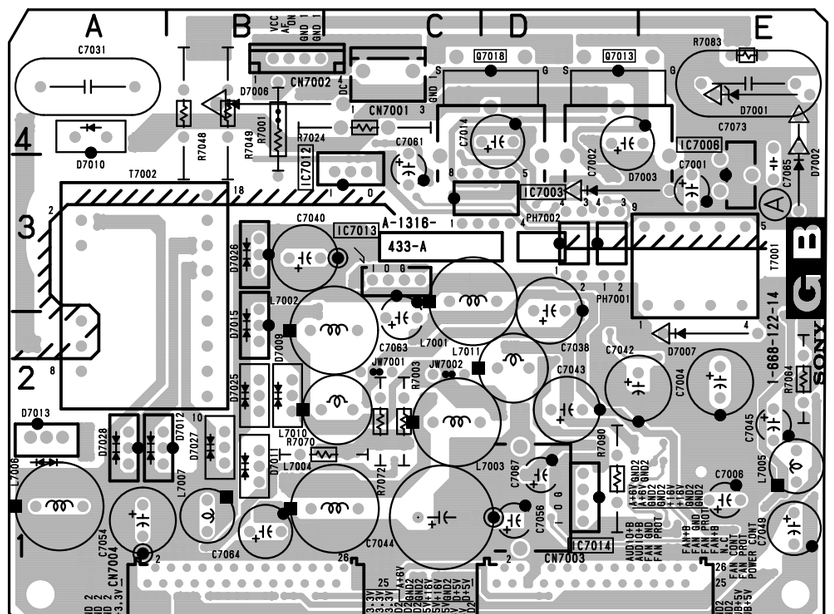

CN9001
4P
:VH-B
AC(N) 1
N.C 2
N.C 3
AC(L) 4
AC INLET
100-120V/220-240V
50/60Hz
C9001
4700p
250V
:E
F9001
6.3A
C9002
4700p
250V
:E
VD9001
FB9001
0.45H
L9001
10mH
3A
R9001
560k
1/2W
:RC
R9002
560k
1/2W
:RC
C9003
1
250V
:MPS
C9004
1
250V
:MPS
C9005
4700p
250V
:E
C9006
4700p
250V
:E
CN9002
3P
:VH-B
5 AC(N)
4 N.C
3 N.C
2 N.C
1 AC(L)
TO GA BOARD
CN8001
F
(AC IN)
The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.
B-SS1668<AEP>-F..


CN8001
3P
:VH-B
AC(N) 5
N.C 4
N.C 3
N.C 2
AC(L) 1
TO F BOARD
CN9002
L8005
60uH
C8010
1.0
275V
:MPS
D8001
D6SB80
800V,6A
D8006
TF861S
800V,6A
D8003
ZP2600
R8001
5.6
5W
:RF
R8002
5.6
5W
:RF
R8004
22k
3W
:RS
R8005
22k
3W
:RS
R8003
1.5k
1W
:RS
L8003
760uH
5A
D8007
D1FS4A
SW
Q8001
2SK3013F
SWITCHING
D8008
D1FS4A
SW
Q8002
2SK3013F
SWITCHING
D8002
FSF10A60
600V,10A
C8026
220
450V
C8046
#
C8011
0.47
400V
:MPS
R8006
#
R8024
0.22
5W
:RW
D8009
D1FS4A
SW
R8007
12
:CHIP
R8008
15k
:CHIP
C8038
470p
3kV
D8010
D1FS4A
SW
R8009
12
:CHIP
R8010
15k
:CHIP
C8039
470p
1kV
D8004
ZP2600
PROTECT
CN8002
3P
:VH-B
1 DC
2 N.C
3 GND 1
CN8003
3P
:VH-B
1 DC
2 N.C
3 GND 1
TO GB BOARD
CN7001
CN8005 #
1 +12
2 GND 1
CN8004
4P
WHT
:S-MICRO
1 VCC
2 AF ON
3 GND 1
4 GND 1
TO GB BOARD
CN7002
LAMP
SCI 1
GND 2
FLAG 3
BALLAST
TO C(1/5)BOARD
CN5006
C8041
0.1
25V
B:CHIP
18.5V
R8039
4.7k
:CHIP
R8037
18k
:CHIP
R8035
#
Q8003
2SC2712
INV
3.7
0.1
R8041
1.5k
:CHIP
R8038
6.8k
:CHIP
R8036
100
:CHIP
C8012
330p
50V
B:CHIP
R8028
33k
:RN-CP
C8013
0.15
16V
B:CHIP
R8019
15
:CHIP
R8011
180k
1/2W
:CHIP
R8012
220k
1/2W
:CHIP
IC8001
FA5331P
PFC
IDET CT SYNC REF ON CS VCC VC
IIN OFF
IFB VDET OVP VFB VIN GND OUT
-0.5 1.6 4.8 3.7 5.3 18.5 18.2
2.7 1.0 0.4 0.6 2.0 1.5 11.6
C8015
68p
50V
:CHIP
C8016
470p
50V
:CHIP
R8014
10k
:CHIP
C8014
0.15
B:CHIP
R8017
150k
:CHIP
R8018
33k
:CHIP
C8099
1000p
B:CHIP
C8035
220
25V
C8034
0.1
50V
:CHIP
R8020
180k
1/2W
:CHIP
R8021
180k
1/2W
:CHIP
R8022
1.5k
:RN-CP
R8032
0
:CHIP
R8031
270k
1/2W
:CHIP
R8015
270k
1/2W
:CHIP
R8016
2.2k
:CHIP
The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.
⚠GA
(POWER FACTOR REGULATING CONTROL)
B-SS1668<AEP>-GA.

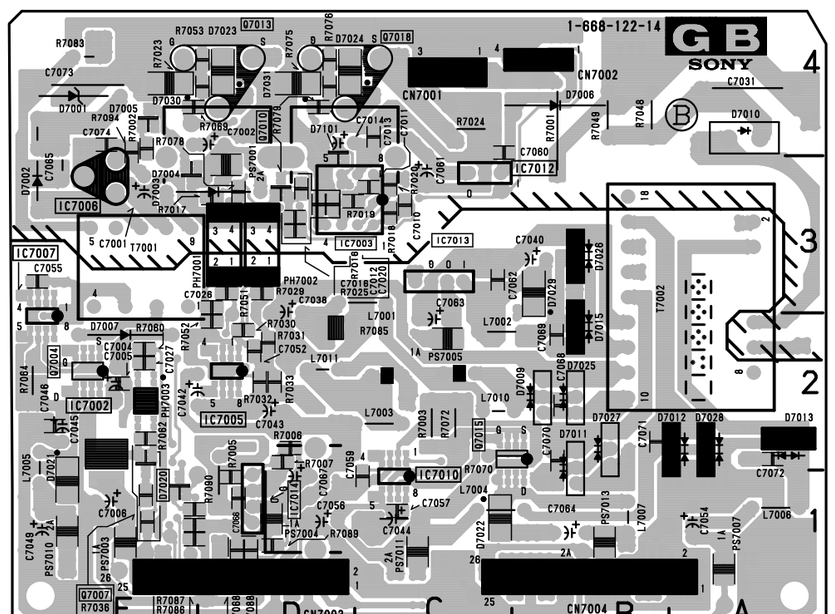
GB BOARD

GB BOARD
*: B SIDE

D7001	E-4
D7002	E-3
D7003	D-3
*D7004	E-3
*D7005	E-4
D7006	B-4
D7007	E-2
D7009	B-2
D7010	A-4
D7011	B-2
D7012	A-2
D7013	A-2
D7015	B-2
*D7020	E-1
*D7021	E-1
*D7022	C-1
*D7023	D-3
*D7024	D-4
D7025	B-2
D7026	B-3
D7027	B-2
D7028	A-2
*D7029	B-3
*D7030	E-4
*D7031	D-4
*D7101	D-4
*IC7002	D-2
IC7003	D-3
*IC7005	D-2
IC7006	E-3
*IC7007	E-2
*IC7010	C-1
IC7012	C-3
IC7013	C-3
IC7014	D-1
*Q7004	E-2
*Q7007	E-2
*Q7010	D-3
Q7013	D-4
*Q7015	B-2
Q7018	D-4



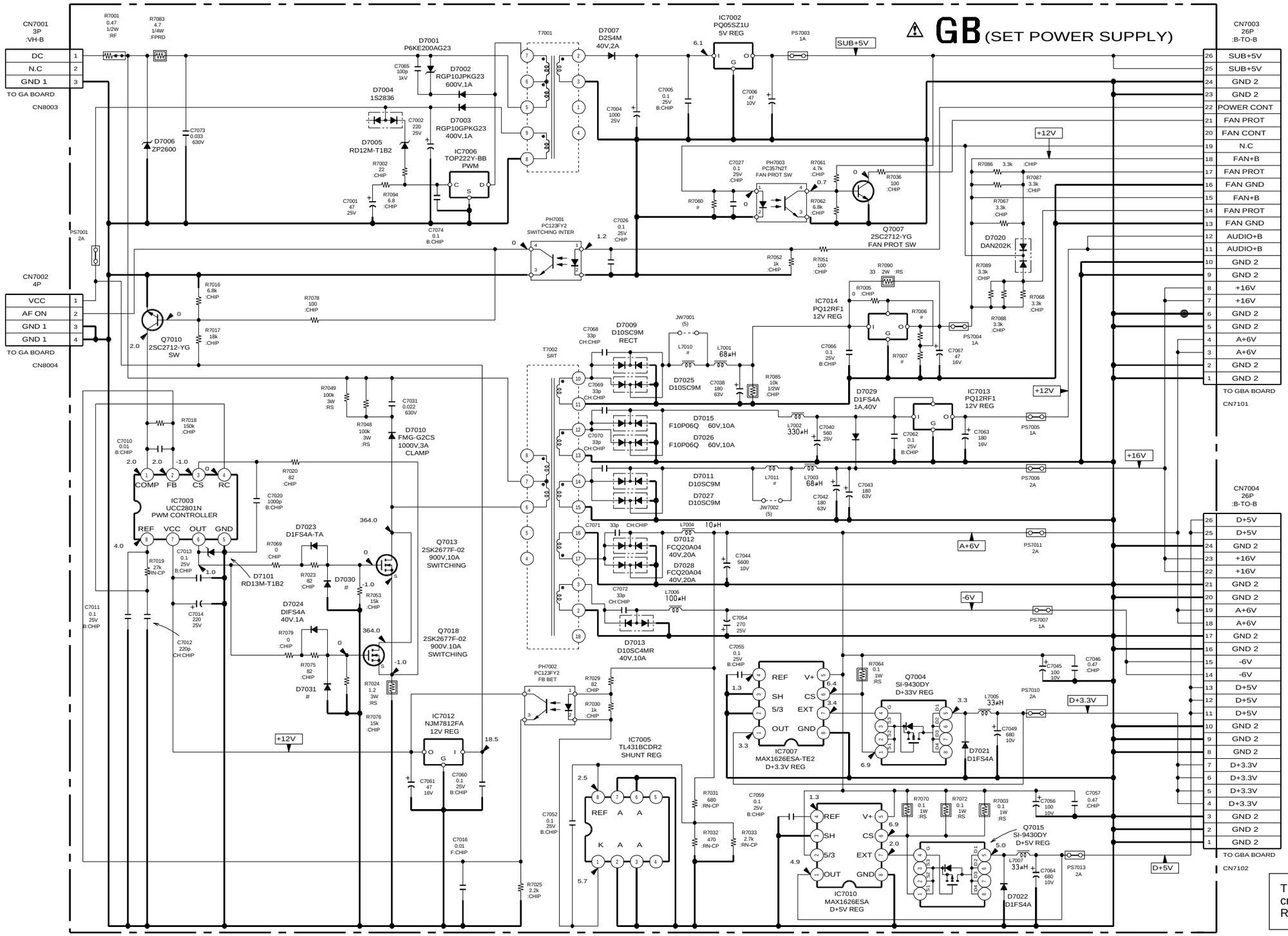
GB -A SIDE-
SUFFIX: -14



GB -B SIDE-
SUFFIX: -14

http://getMANUAL.com

⚠ GB (SET POWER SUPPLY)



B-SS1668<AEP>-GB.

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

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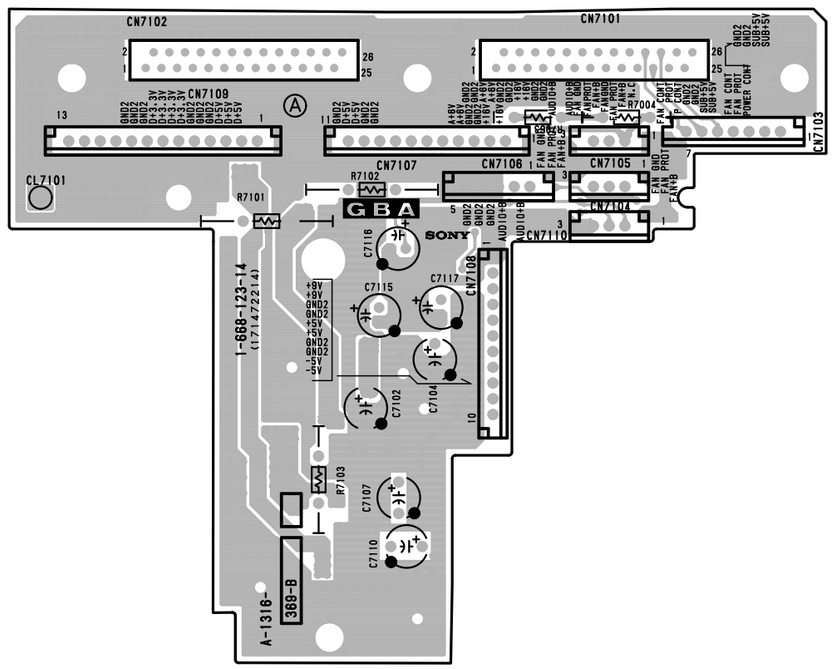
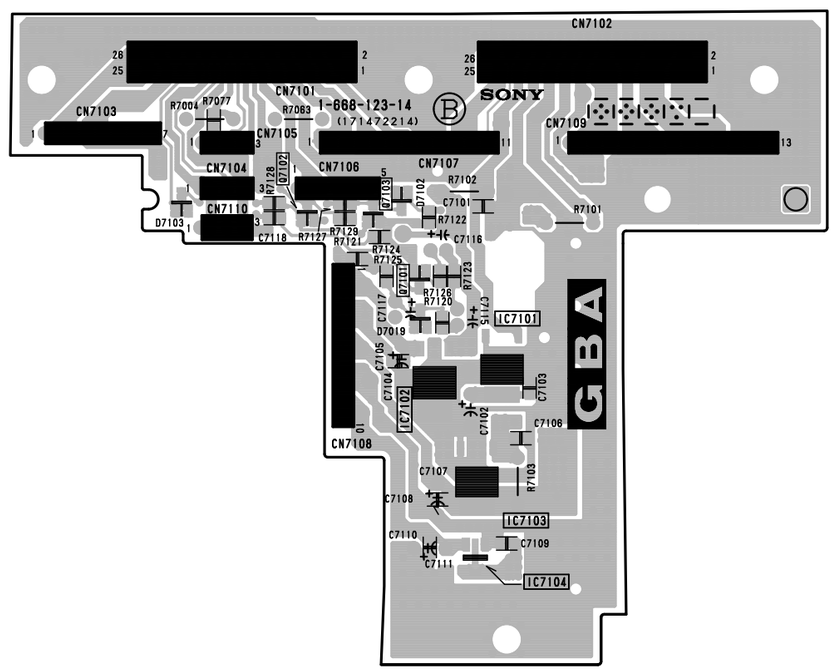
Ne les remplacer que par une piéce portant le numéro spécifié.

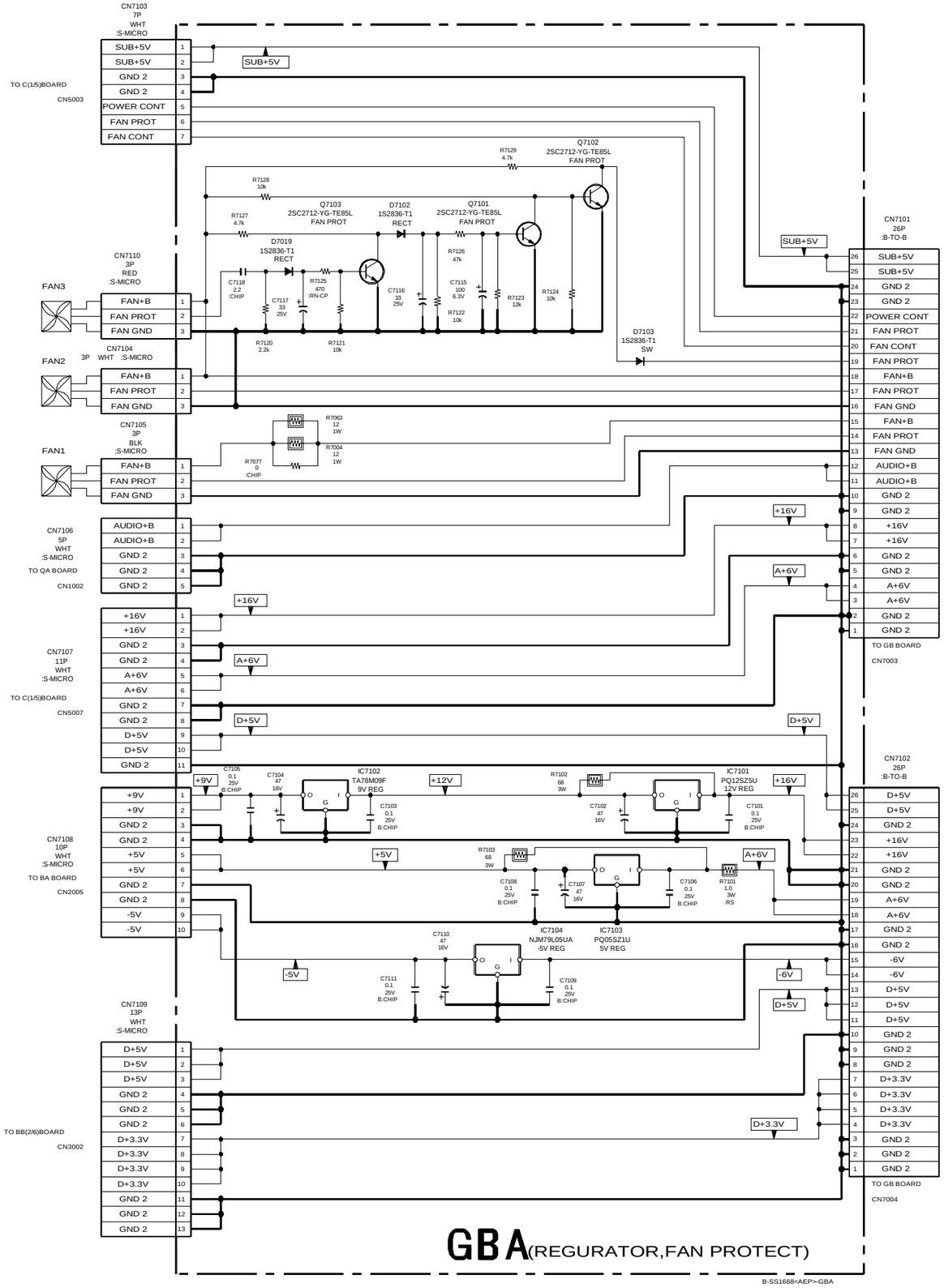
GBA BOARD



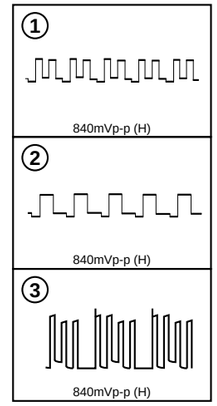


GBA -A SIDE-
SUFFIX: -14

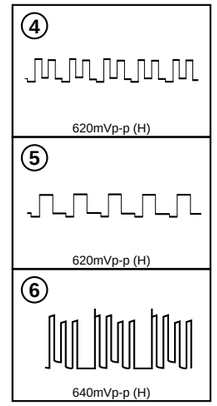
GBA -B SIDE-
SUFFIX: -14

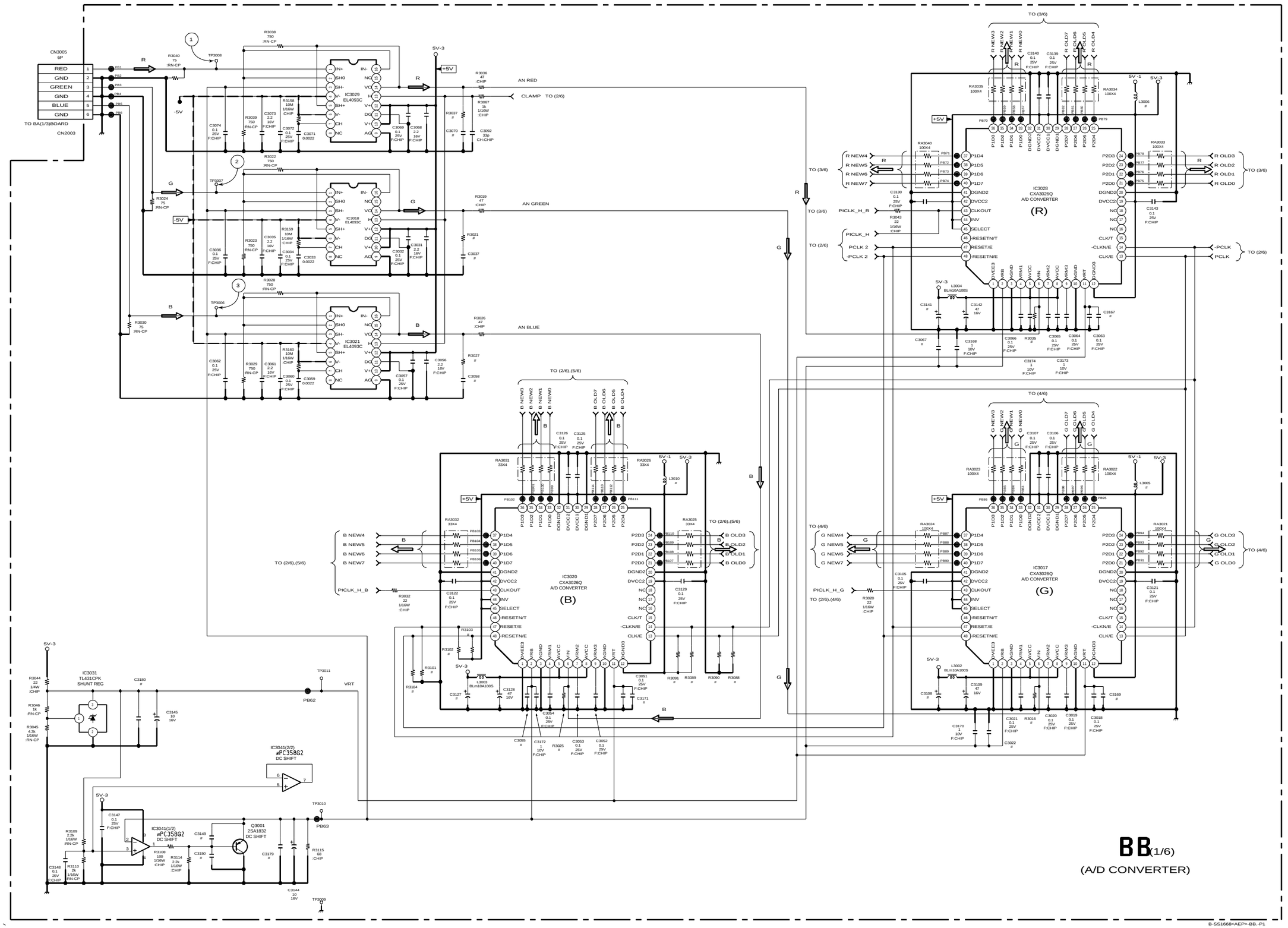


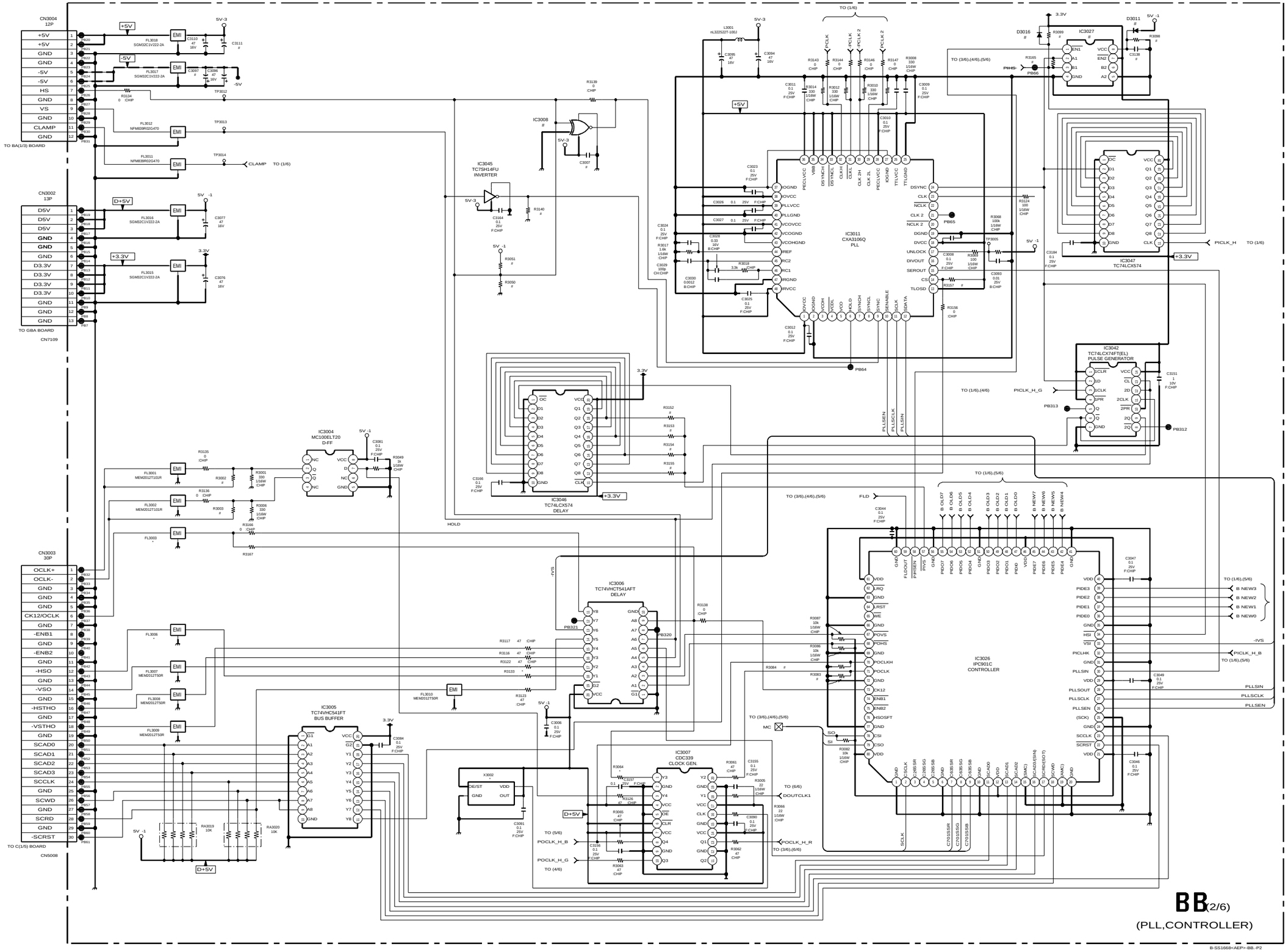
BB BOARD WAVEFORMS (1/6)

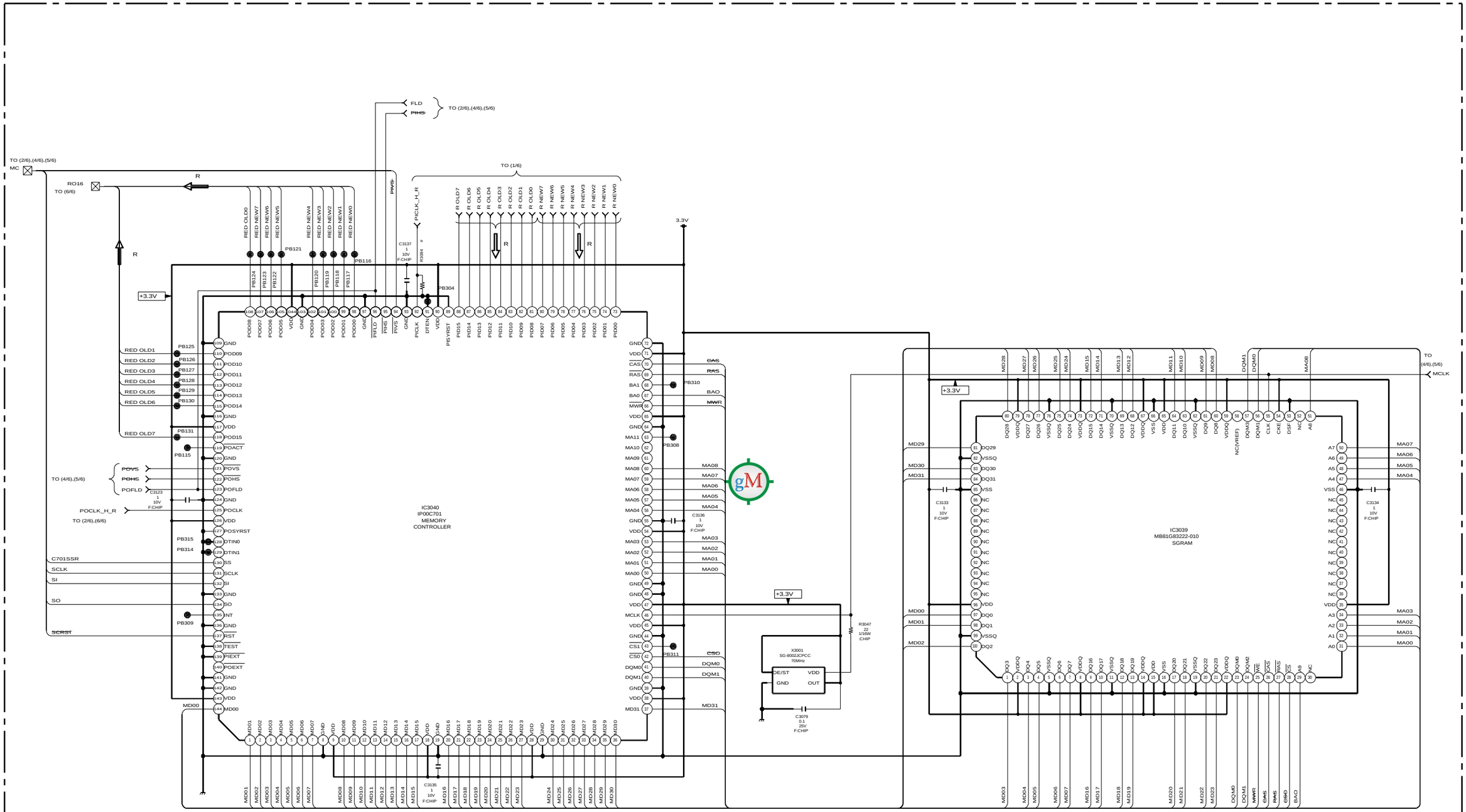


BB BOARD WAVEFORMS (6/6)




CN3005
6P
RED 1
GND 2
GREEN 3
GND 4
BLUE 5
GND 6
TO BA(1/3)BOARD
CN2003
AN RED
AN GREEN
AN BLUE
CLAMP TO (2/6)
IC3029 EL4093C
IC3018 EL4093C
IC3021 EL4093C
IC3028 CXA3026Q A/D CONVERTER (R)
IC3020 CXA3026Q A/D CONVERTER (B)
IC3017 CXA3026Q A/D CONVERTER (G)
IC3031 TL431CPK SHUNT REG
IC3041(2/2) μPC358G2 DC SHIFT
IC3041(1/2) μPC358G2 DC SHIFT
Q3001 2SA1832 DC SHIFT
TO (2/6),(5/6)
TO (3/6)
TO (4/6)
TO (2/6)
TO (4/6)
TO (2/6),(4/6)
BB(1/6)
(A/D CONVERTER)
B-SS1668<AEP>-BB.-P1

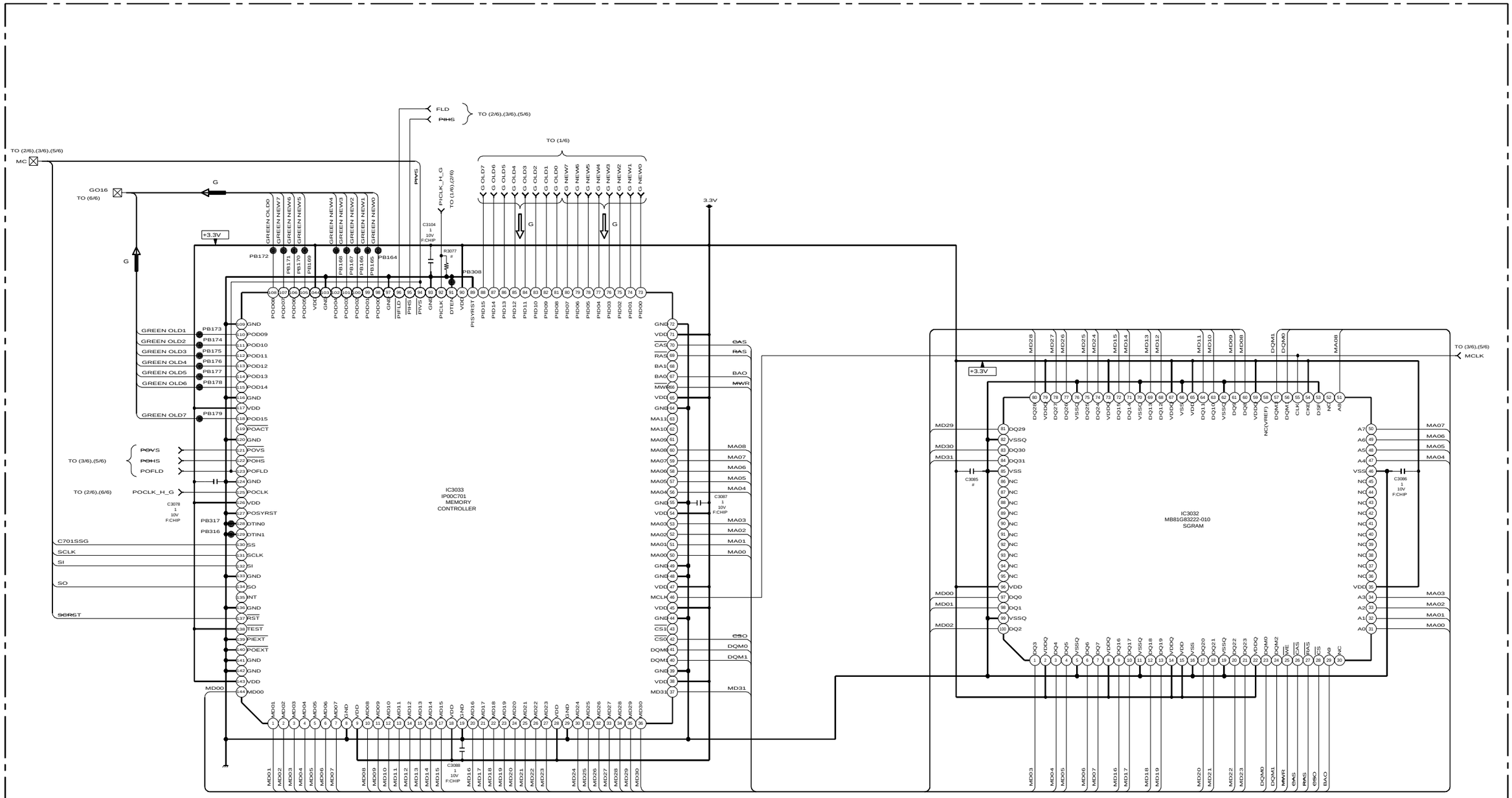

CN3004
12P
+5V
+5V
GND
GND
-5V
-5V
HS
GND
VS
GND
CLAMP
GND
TO BA(1/3) BOARD
CN3002
13P
D5V
D5V
D5V
GND
GND
GND
D3.3V
D3.3V
D3.3V
D3.3V
GND
GND
GND
TO GBA BOARD
CN7109
CN3003
30P
OCLK+
OCLK-
GND
GND
GND
CK12/OCLK
GND
-ENB1
GND
-ENB2
GND
-HSO
GND
-VSO
GND
-HSTHO
GND
-VSTHO
GND
SCAD0
SCAD1
SCAD2
SCAD3
SCCLK
GND
SCWD
GND
SCRD
GND
-SCRST
TO C(1/5) BOARD
CN5008
FL3018 SGM32C1V222-2A
FL3017 SGM32C1V222-2A
FL3012 NFM839R02G470
FL3011 NFM839R02G470
FL3016 SGM32C1V222-2A
FL3015 SGM32C1V222-2A
FL3001 MEM2012T101R
FL3002 MEM2012T101R
FL3003
FL3006
FL3007 MEM2012T50R
FL3008 MEM2012T50R
FL3009 MEM2012T50R
FL3010 MEM2012T50R
CLAMP TO (1/6)
IC3045
TC7SH14FU
INVERTER
IC3008
IC3004
MC100ELT20
D-FF
IC3046
TC74LCX574
DELAY
HOLD
IC3006
TC74VHCT541AFT
DELAY
IC3005
TC74VHC541FT
BUS BUFFER
IC3007
CDC339
CLOCK GEN.
X3002
IC3011
CXA3106Q
PLL
IC3026
IPC9901C
CONTROLLER
IC3027
IC3047
TC74LCX574
IC3042
TC74LCX74FT(EL)
PULSE GENERATOR
D3016
D3011
TO (1/6)
TO (3/6),(4/6),(5/6)
TO (1/6),(4/6)
TO (1/6),(5/6)
TO (5/6)
TO (4/6)
TO (6/6)
TO (3/6),(6/6)
PICLK_H_G
PICLK_H
PICLK_H_B
POCLK_H_B
POCLK_H_G
POCLK_H_R
PLLSEN
PLLSCLK
PLLSIN
PLLSOUT
-IVS
HOLD
DOUTCLK1
SCLK
FLD
PHS
MC
SO
SI
D+5V
5V -1
3.3V
+3.3V
RA3019 10K
RA3020 10K
BB(2/6)
(PLL,CONTROLLER)
B-SS1668<AEP>-BB.-P2

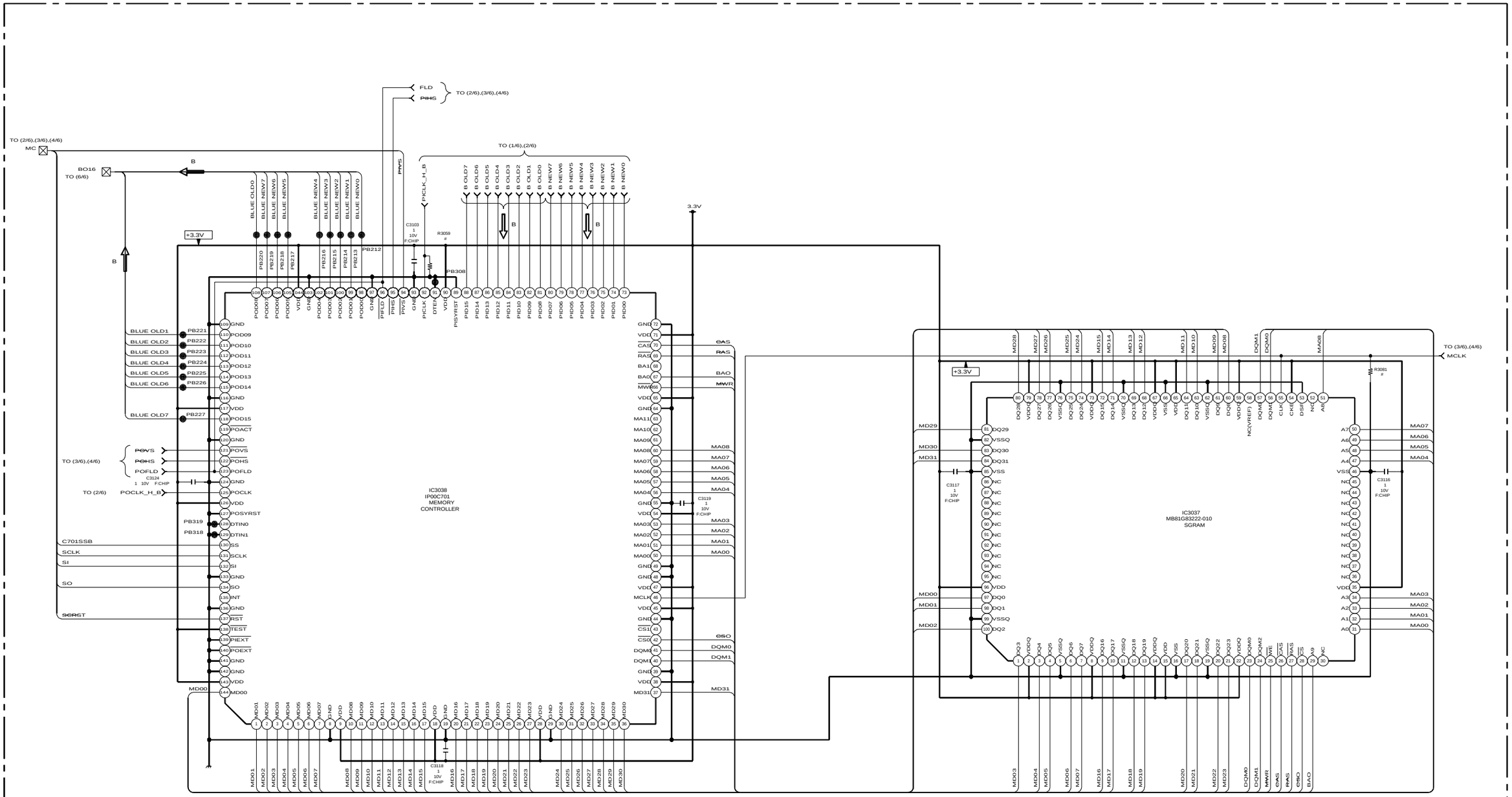


BB (3/6)

(MEMORY CONTROL(R))

B-SS1668<AEP>-BB.-P3

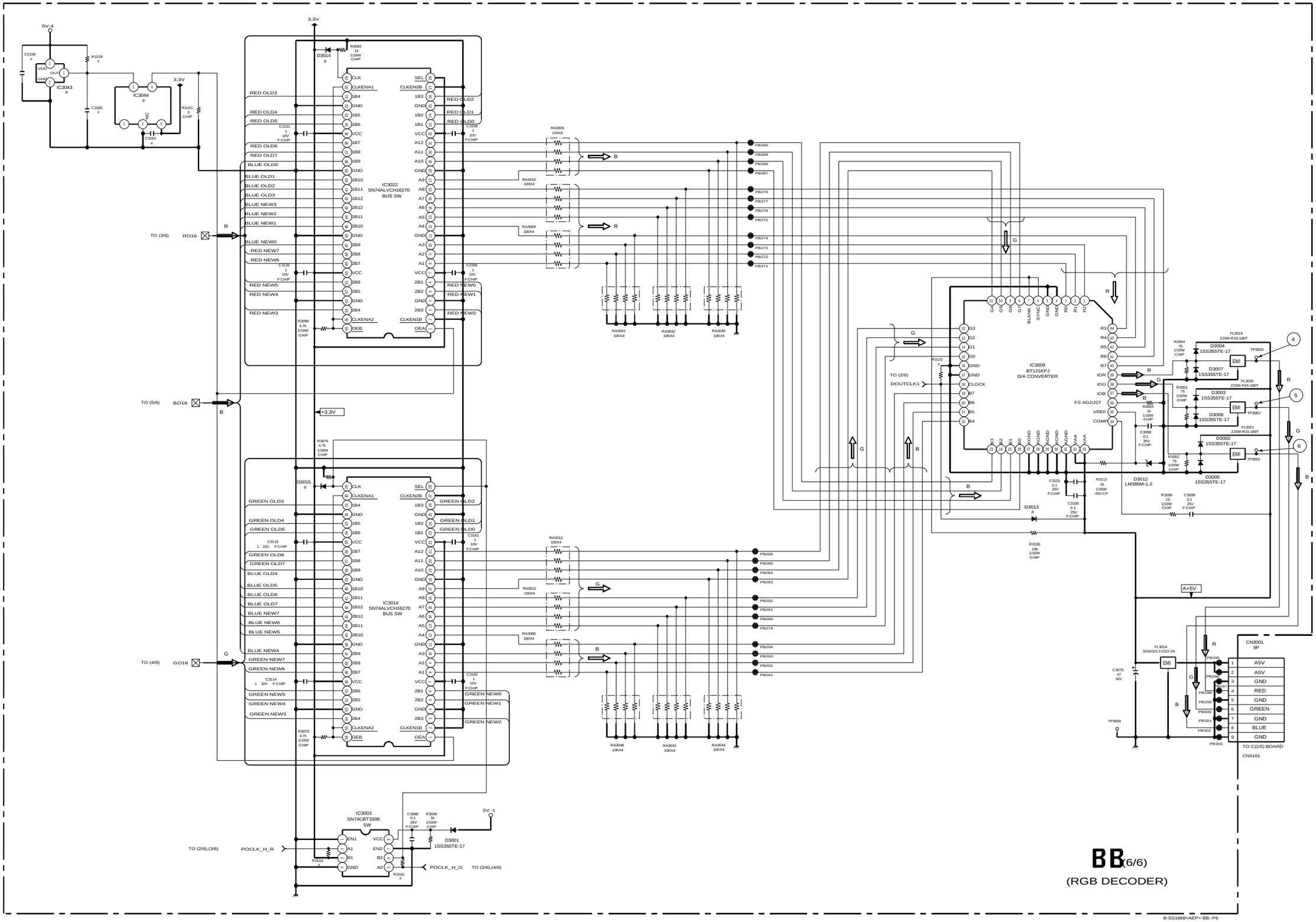

TO (2/6),(3/6),(5/6)
MC
GO16
TO (6/6)
FLD
PIHS
TO (1/6)
PVS
PICLK_H_G
TO (1/6),(2/6)
G OLD7
G OLD6
G OLD5
G OLD4
G OLD3
G OLD2
G OLD1
G OLD0
G NEW7
G NEW6
G NEW5
G NEW4
G NEW3
G NEW2
G NEW1
G NEW0
GREEN OLD0
GREEN NEW7
GREEN NEW6
GREEN NEW5
GREEN NEW4
GREEN NEW3
GREEN NEW2
GREEN NEW1
GREEN NEW0
+3.3V
3.3V
C3104 1 10V F.CHIP
R3077 #
PB172
PB164
PB308
GREEN OLD1
GREEN OLD2
GREEN OLD3
GREEN OLD4
GREEN OLD5
GREEN OLD6
GREEN OLD7
POVS
POHS
POFLD
TO (3/6),(5/6)
TO (2/6),(6/6)
POCLK_H_G
C3078 1 10V F.CHIP
PB317
PB316
C701SSG
SCLK
SI
SO
SBRST
MD00
IC3033
IP00C701
MEMORY
CONTROLLER
C3088 1 10V F.CHIP
C3087 1 10V F.CHIP
CAS
RAS
BA1
BA0
MWR
MCLK
MA11
MA10
MA09
MA08
MA07
MA06
MA05
MA04
MA03
MA02
MA01
MA00
CS1
CS0
DQM0
DQM1
MD31
MD01
MD02
MD03
MD04
MD05
MD06
MD07
MD08
MD09
MD10
MD11
MD12
MD13
MD14
MD15
MD16
MD17
MD18
MD19
MD20
MD21
MD22
MD23
MD24
MD25
MD26
MD27
MD28
MD29
MD30
IC3032
MB81G83222-010
SGRAM
C3085 #
C3086 1 10V F.CHIP
MD29
MD30
MD31
MD00
MD01
MD02
DQ29
VSSQ
DQ30
DQ31
VSS
NC
VDD
DQ0
DQ1
VSSQ
DQ2
DQ3
VDDQ
DQ4
DQ5
VSSQ
DQ6
DQ7
VDDQ
DQ16
DQ17
VSSQ
DQ18
DQ19
VDDQ
VDD
VSS
DQ20
DQ21
VSSQ
DQ22
DQ23
VDDQ
DQM0
DQM2
WE
CAS
RAS
CS
A9
NC
A8
A7
A6
A5
A4
A3
A2
A1
A0
DQM1
DQM3
CLK
CKE
DSF
NC(VREF)
MD28
MD27
MD26
MD25
MD24
MD15
MD14
MD13
MD12
MD11
MD10
MD09
MD08
DQM1
DQM3
CLK
CKE
DSF
NC(VREF)
A8
MA08
MA07
MA06
MA05
MA04
MA03
MA02
MA01
MA00
BB (4/6)
(MEMORY CONTROL(G))
B-SS1668<AEP>-BB.-P4



BB (5/6)

(MEMORY CONTROL(B))

B-SS1668<AEP>-BB.-P5


5V-4
3.3V
IC3043
IC3044
IC3022
SN74ALVCH16270
BUS SW
IC3014
SN74ALVCH16270
BUS SW
IC3009
BT121KPJ
D/A CONVERTER
IC3003
SN74CBT3306
SW
D3014
D3015
D3001
1SS355TE-17
D3012
LM385M-1.2
D3013
D3004
D3007
D3003
D3006
D3002
D3005
TO (3/6)
RO16
TO (5/6)
BO16
TO (4/6)
GO16
TO (2/6),(3/6)
POCLK_H_R
POCLK_H_G
TO (2/6),(4/6)
TO (2/6)
DOUTCLK1
FS ADJUST
VREF
COMP
A+5V
5V -1
CN3001
9P
TO C(2/5) BOARD
CN5101
RED OLD3
RED OLD4
RED OLD5
RED OLD6
RED OLD7
BLUE OLD0
BLUE OLD1
BLUE OLD2
BLUE OLD3
BLUE NEW3
BLUE NEW2
BLUE NEW1
BLUE NEW0
RED NEW7
RED NEW6
RED NEW5
RED NEW4
RED NEW3
GREEN OLD3
GREEN OLD4
GREEN OLD5
GREEN OLD6
GREEN OLD7
BLUE OLD4
BLUE OLD5
BLUE OLD6
BLUE OLD7
BLUE NEW7
BLUE NEW6
BLUE NEW5
BLUE NEW4
GREEN NEW7
GREEN NEW6
GREEN NEW5
GREEN NEW4
GREEN NEW3
RA3005
RA3010
RA3009
RA3012
RA3011
RA3006
RA3041
RA3042
RA3045
RA3046
RA3043
RA3044
PB290
PB289
PB288
PB287
PB278
PB277
PB276
PB275
PB274
PB273
PB272
PB271
PB286
PB285
PB284
PB283
PB282
PB281
PB280
PB279
PB294
PB293
PB292
PB291
A5V
GND
RED
GREEN
BLUE
BB (6/6)
(RGB DECODER)
B-SS1668<AEP>-BB.-P6

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